
THE FACEBOOK PROJECT

PERFORMANCE AND CONSTRUCTION OF DIGITAL IDENTITY

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ABSTRACT

In recent years an impressive number of youth have taken to joining popular online social networking service (SNS) websites. One of the most famous and prosperous of these within the US college student community is Facebook.com. Facebook functions as a purposed network of identities, deposited expressions, and interactive media that make for a meaningful digital space that has become interlaced into the day-to-day lives of most students. The Facebook ecology facilitates an emergent, intricate, and robust arena of interactions and representations that serve to mediate the construction of identity.

How is it then, that participants perform—and thus construct—their identities on Facebook.com? This paper begins to answer this question within the folds of an intriguing, if not elaborate exploration. It reviews pertinent background information on Facebook, as well as its social relevancy, and highlights some of the applicable psychological and sociological theories on identity, starting with Erving Goffman's dramaturgical approach. Several salient, mediating elements of digital architecture are discussed, including anonymity, disembodiment, virtual space, temporal context, interface and metaphors, and their correspondent relation to Facebook. The literature review includes a concise analysis of much of the material already available on Facebook and should bring readers up to speed with the perspective employed for the research questions in this work.

The scope of this study includes examination of Facebook activity, perceptions, and personal identity management specifically found in two surveys conducted on the University of Illinois, Urbana-Champaign undergraduate student population roughly a year apart – one from May of 2006 and one from May of 2007- that shared inquires into the same topics. These data are employed in order to offer insight into and examples of the various social intricacies at play in Facebook, particularly with a focus on the representation of identity information, privacy and sharing preferences, and social norms.

Among instances of identifying examples of audience and performance the findings indicate that users of all kinds are active on Facebook. Interestingly enough, many students *do* feel Facebook is invasive to their privacy, but clearly not enough so to reduce their constant use of the system. With only a few exceptions, the level of personal identity information people share on Facebook is pretty similar to what they would announce in the face to face world. These conclusions hold important implications about the state of social norms and digital identity and may serve as the basis for future research on Social Networking Services.

KEYWORDS AND TAGS

Facebook, social networking service, digital identity, privacy, identity management, Goffman, construction of identity, performance of identity, undergraduate students

READERS

As determined by the University of Illinois Department of Sociology, this paper must have three Professors of Sociology with formal appointments as readers. They are as follows:

JORGE CHAPA

Jorge Chapa is the first permanent Director of the Center on Democracy in a Multiracial Society at the University of Illinois at Urbana-Champaign. He is also a Professor of Sociology and Latina/Latino Studies. Chapa's research has focused on alternatives to increase the successful participation of minorities in higher education and other public institutions. He is also currently doing research on immigration policy issues and voting rights.

Jorge has helped to guide Jeff Ginger through his Masters Paper enacting as his primary reader and graciously dedicating time and effort to ensure his success by guiding him with an independent study. Without his assistance Jeff would never have been able to write his paper for Sociology.

MARKUS SCHULZ

Markus Schulz is a new Professor to the University of Illinois. His fields of study include Social Theory, Transnational Processes, Political Imagery, Social Movements, New Media, and research on Latin America. His insights to this paper have been some of the most thorough and provocative and he never fails to impress Jeff with his ability to perform such expert close-readings.

LORI KENDALL

Lori Kendall is an Associate Professor in Library and Information Science. She shares a strong background in Sociology and specializes in studies of online community and identity, the social aspects of computing, and gender and technology. She was kind enough to enact as Jeff's advisor during his transition to GSLIS and has brought a unique and extraordinarily valuable perspective to bear on the evaluation of this work.

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In recent history we have seen the transformation from a primarily industrialized modern American society to a global, fluid, and fast paced information era that encompasses virtually every aspect of our lives. Production and consumption, exchange and ownership of information, and even our perceptions of identity and community have all experienced paradigm shifts with the coming of the information age. The availability and specialization of information has skyrocketed as the internet has become an increasingly ubiquitous aspect of the first world. Just as people of the past came to depend and thrive upon electricity, the developed world now embraces instant and easy connection. For most in the U.S. computers have become directly associated with the internet, and many other devices such as cell phones, TV's, and mp3 players have begun to follow suit. The new forms of media embedded in and enabled by the internet open up a new world of innovations, expressions, relationships, and communities. Perhaps more than ever before, the heterogeneity evident in the U.S. (and international) social mesh calls for revolutionary and anti-disciplinary models of epistemology and analysis.

Just as computer mediated communication has formed new social contexts and altered the fabric of others, revolutions and evolutions within the world of the web have experienced transformations in kind. What was once a network of research and military computers has grown in leaps and bounds with the introduction of standards (such as URL's, HTML, and active components like Flash or AJAX), avenues of connection (modem, broadband, wireless and satellite), communication strategies (a synchronous email, instant messaging, conveyance through multimedia) and increasingly effective and robust virtual environments (MUDs and newsgroups, GUI-based forum communities and blogs, and now wikis and social networking services). Social networking services (SNS) are social software systems focused on creating social networks online, where pre-existing and new connections are enhanced, verified, and even built. Though their roots are independent from the internet, they have taken on a new form and life far beyond their previous existence outside of cyberspace. Internet based systems of SNS have vitally reframed and reformed computer mediated communication (CMC), interaction, and even the potential and opportunity for productive human agency.¹ Studies have shown that these tools offer numerous benefits for both the work place and in social contexts (Wellman and Haythornthwaite 1998, 2002, to offer just a couple) and have undergone assimilation into daily use as

¹ It's really something to think about. Yochai Benkler even sees collaborative participation and production as representative of the next as the next stage of human organization. <http://www.ted.com/talks/view/id/247>

extensions of most social processes including personal communications, expression, and relationships (Haythornthwaite and Nielson 2007). Indeed, with the coming of Web 2.0 most scholars now agree that the internet and CMC have reached a point of ubiquity and merit increasingly thorough and specialized studies (Lievrouw 2004, Haythornthwaite and Nielson 2007).

The impact of SNS on the US (and increasingly international) high school and college student population is nothing short of monumental. Students have grown up socialized into a world shaped by the internet and brandish native and latent intuitions and understandings of internet technology unknown to previous generations (Mcmillan and Morrison 2006). Just like our parents grew up with the TV as a part of their childhood, and our grandparents with the radio, youth develop skills and comfort with the web from the start. Social networking services are a natural extension of life for connected youth, one they can easily explore, partake and shape. As the business and academic world (and perhaps non-institutionalized social norms) inspire a life progressively filled with more multitasking many youth are challenged by perceptibly limited time for face-to-face interactions. Online meeting places and social networks facilitate opportunities for the development of personal relationships in parallel with (and beyond) their offline counterparts. Indeed the internet may be a place where previously impossible relationships can happen. Research has found that people are often more comfortable in virtual environments as a result of the uncertainty reduction strategies² endowed by the CMC constituency (Mazer et al. 2007, Caplan 2003).

Social networks must credit their impressive success, at least in part, to factors of convergence³ and network effects.⁴ They thrive on viral propagation and provide a plethora (perhaps too many) of functions and have managed to almost fully saturate the college student population. Those such as Facebook and MySpace were originally deemed an entirely youth exclusive public and private space for kids to inhabit and shape. SNS enables users to present and investigate virtual profiles (digital

² The computer-mediated communication environment often allows for actions that might not otherwise happen—increased opportunities to develop personal relationships, intimate questions and self-disclosures, and alternative methods of expression through use of font, special language, punctuation, emoticons, links, multimedia, or variant social norms for timing and attention.

³ As electronic technologies develop today they tend to include more and more features and functions. Operating systems provide all kinds of built-in software, cell phones acts as cameras and mp3 players, and TV's and computers are becoming one.

⁴ A network effect is an aspect of a good or service that increases or decreases in value depending on the number of customers who use or purchase it; the number of people who previously have adopted the good or service is of vital importance in determining its value for new buyers.

representations of people), browse and post pictures, observe, join, and create events and groups (purely digital, cultural or corresponding to ones offline), post journals and multimedia (such as music, videos, and art), view the latest news on their friends' online lives and link to a myriad of advertising and marketing. What's more is that SNS systems represent opportunities for entertainment, social movements, new forms of expression, the enhancement of social capital and thresholds of information previously unknown. *The cyberspaces found in SNS have become become a new terrain for the activity and performance in which identity is mediated, shared, and otherwise constructed.*

This paper's task is to explore some of the ways in which identity is constructed on Facebook, and the implications thereof. Crucial to understanding this, however, is the background and social relevancy of Facebook, as well as some of the applicable psychological and sociological theories on identity, all of which are overviewed in the next section. Following this is a literature review of relevant research on Facebook as well as its relationship to this study. The collection of history, literature review, and theory is then brought to bear on data collected over the span of two years through surveys of the undergraduate student population at the University of Illinois at Urbana-Champaign. The compilation seeks to supply insight into the ways people perform their identity on Facebook, how they feel about the Facebook environment, and how the management of their digital identity compares to the way they disclose information about themselves in the everyday face-to-face world. The paper concludes with a short discussion of some of the implications and potential areas for future study.

2 | BACKGROUND ON FACEBOOK

Arguably one of the most influential SNS websites on the internet, Facebook.com is a comprehensive and encompassing clustering of networks based on universities and colleges, high schools, work places, and geographic areas. These membership networks are independent of one another but based on the same interface and systems of interaction. Intersections and overlaps between each network are possible but they often have crucial and intentional barriers to access in between. Started originally in February of 2004, Facebook hit its first tipping point in the late summer of that year with the introduction of groups and public posting ‘walls.’ A second surge in growth resulted from Facebook’s introduction to the global public – the site went from consistently hovering around 14 million unique visitors per month to over 26 million (Lipsman 2007c). In the span of a little over 3 years - from 2005 to 2008—the user count has grown over 20 times in size.⁵ Facebook has grown in leaps and bounds over the years. They started out in September of 2005 with what seems like a mere 3.5 million members (Arrington 2005) and grew steadily as they added more college networks to eventually encompass them all. In the span of just half a year (July 2006 to February 2007) the site grew from 7.5 million registered accounts to nearly 18 million (Abram 2007). By May that spring they had hit 24 million and closed the summer with 39 million in September (Wakabayashi 2007). As of May 2008 collectively Facebook claims over 80 million members (users who have returned to the site in the past 30 days, a better measure than those of MySpace who count the millions of porn bots) and remains one of the fastest growing websites on the internet (Facebook Press Room 2008a). Sources vary, but University network membership saturation ranges between an average of 85% and 95% (Golder, Wilkinson, and Huberman 2006, Arrington 2005, Ellison, Steinfeld, and Lampe 2005, Jones and Soltren 2005, Facebook Press Room 2008b) for most schools; the last network-based count for the Uillinois Network placed a 92% membership rate among the undergraduate population.⁶ Responses from the survey featured in

⁵ Based on comparisons between news reports.

⁶ Collected April of 2006 during the time period when you could only join the UIUC network with a valid University ID. Facebook search queries pass data in the URL query strings – recognizing which variables correspond to each parameter I could set the page display range at a higher index manually, allowing myself to see the last profiles available on the network and gaining an accurate count of UIUC Facebook member profiles. I performed a search for all students listed as undergraduates and divided this number by the total number of undergraduate students listed on the quick facts page on the UIUC home site. Accounting for a 1% inflation rate for students with multiple profiles, drop-outs, transfers, graduated members (at the time only a small number had not updated their profiles to reflect their alumni status), I came up with the estimate of 92% which I first documented in *Social Computing Phenomena*, a paper written in May of 2006. Facebook later altered search results to display only the first 500 of a given category. I have yet to determine a new inclusive method of counting.

this paper estimate something closer to a 97% coverage though this number is likely inflated due to several factors,⁷ most notably the survey's deployment over the web. Regardless, the sheer number of users and level of penetration makes the site a pretty big deal.

At the time of this writing the Facebook company has over 500 employees spanning their offices in Palo Alto California, New York, and London and are looking to hire more application developers. Their board of directors includes the founder, Mark Zuckerberg, Jim Breyer, of Accel Partners, and Peter Thiel as well as observers David Sze of Greylock Partners and Paul Madera of Meritech (Facebook Factsheet 2008).

2.1 | POPULARITY

Facebook ranks as one of the most visited websites on the internet, with sources claiming as high as the 3rd most visited based on page views, and they now account for at least 1% of all time spent on the internet (Freiert 2007b, Abram 2007, Alexa.com 2008). Among college students the website is an even more common stop than Google and outpaces MySpace by a significant margin (Anderson Analytics 2007). More than 60% of members log in daily and many sign on multiple times a day while the average visitor spends over three hours of time on the site each month (Holahan, Hof, and Ante 2007, Arrington 2005). The most common activities (based on time spent) overall are in descending order: browsing profiles, interacting with applications, browsing pictures, joining or visiting groups, searching for members and groups, and joining and browsing networks (Freiert 2007a). In 2007 most users were between the ages of 12 and 24, however nearly an equal number amass in the age demographic of 35 and up (Lipsman 2007a, 2007b). The website in its entirety boasts more than 16 million page views and well beyond 600 million searches per month (Lipsman 2007a, Abram 2007). The most recent count of average daily visitors is nearly 15 million, with the vast majority (85%) connecting from the US and Europe (Lipsman 2007b). The Uillinois network is by comparison relatively large, weighing in at over 62,000 profiles⁸. Facebook is the most viewed website by both females (69%) and males (56%) ages 17-25 in the United States, even surpassing MySpace.com (eMarketer Survey 2007). Facebook has essentially hit full saturation amongst most colleges and commands a high usage rate in

⁷ Students may be more likely to respond to a survey about Facebook if they are already Facebook members. Intensive and interested Facebook users are also probably more likely to be active internet users who check their email frequently, as Facebook sends many emails and is considerably easier to operate with broadband.

⁸ Uillinois statistics page on Facebook.com July 2008

many western nations. It continues to expand internationally and diversify its audience by adding more and more country-based networks.

An early study by the HP Information Dynamics Laboratory answered the critique that simple membership and login rates are inaccurate predictors of SNS popularity by measuring the use of the Facebook message system and finding intense patterned activity (Golder et al. 2005). The study further illuminated the regularities of time use of college students and their respective social lives. In all, Facebook commands a hefty sum of users, many of whom use the site quite intensively.

2.2 | POTENTIAL WORTH

In addition to the pervasiveness and popularity of Facebook its potential worth is considerable. Facebook started off in the summer of 2004 with 500,000 dollars in funding from Peter Thiel and by May of 2005 had raised 12.7 million dollars in capital with Accel Partners (Facebook Factsheet 2008, Accel Partners website 2005). They later received 27.5 million from Greylock Partners and higher bids from the aforementioned investors (Facebook Factsheet 2008). In March of 2006 Business week reported on negotiations for a possible Viacom acquisition of the site. According to the article, the company declined an offer of \$750 million and it was rumored that the asking price was as high as \$2 billion (Rosenbush 2006). As tensions escalated in 2007 surrounding Google's *Open Social*⁹ the corporate behemoth Microsoft invested an equity stake in exchange for exclusive rights to handle ads for Facebook globally. Microsoft spent 240 million dollars for a 1.6 percent stake, which came from a valuation of Facebook totaling 15 billion dollars (Sloane 2007). Facebook's true value is a subject of great debate¹⁰; as with most businesses estimating worth becomes a tricky political matter.

The Facebook dataset presents an untold potential for authentic and elaborate detail on college student (and increasingly internet users at large) habits, interests, and marketability. The information garnered from analysis of Facebook is arguably superior to what any broad data collection or survey on the college student population could pray to collect. Participants voluntarily present information about themselves instead of being asked or forced to do so by researchers. As the social science realm comes

⁹ OpenSocial is a set of common APIs for building social applications across many websites and consists of both JavaScript APIs and Google Data APIs. Find more information at <http://code.google.com/apis/opensocial/>

¹⁰ In fact a panel of business-world (non-academic) Facebook experts argued about it so much at the 2007 Graphing Social Patterns conference that it gathered a bit of fame on the web: <http://www.podtech.net/home/4360/facebook-fanboys-are-you-pro-or-con>

to regularly recognize the importance of studying social networking on the internet, it is likely Facebook will become a common source of data for observation.

2.3 | THE FACEBOOK EXPERIENCE

Facebook has a different feel than most websites, even ones that might be considered similar like dating websites or professional job seeking networks. The entire system is organized around exploring and engaging other participants. The idea is to help you access and display as much information about yourself and others as you want and at the same time pursue connections between the heterogeneous mess of people, components, and ideas. Facebook is a source of information, place of communication, and, as is proposed and flushed out later in this paper, a multifaceted arena of identity performance. It is fundamentally a socio-technical mesh; a blending between human actors, echoes of abstract individual personalities and social perspectives, and code-powered, semi-automated visual interfaces. Access is mediated by both cell phones and computers of all types.

Upon logging on visitors are greeted with the impression of activity by looking at the newsfeed, their latest application updates and the published shifting statuses of their friends. On some level it's almost comparable to the buzz of a city (Stutzman 2007a) or the front page of a newspaper. One can see some of what's going on amongst their friends on the site and do things like track specific recent changes in their friend's profiles or upload new media to share with their classmates. A student might chase down classmates or find that person they ran into on the quad earlier, or seek the social hub of a campus group they've just joined. Often all it takes is an impartial set of information – a first name and a major, a year and a club membership, an email address or AIM handle – to find specific people in the system. In most cases this sharing of media, identities and knowledge is desirable. Students can keep in touch with family members and distant friends, see pictures of someone they wish to take out on a date, or download the latest song their buddy many miles away composed in his bedroom. The process is much easier than it would be to normally accomplish such tasks without the help of Facebook largely because just about every venture in social exchange is a function available through the system. Facebook is notably conducive to one-sided activity and browsing, or 'stalking' as most users refer to it. Surely most of the aforementioned tasks have run rampant throughout programs and websites for years prior, but with such high logon rates, deep integration, and the ability for anyone to conduct them unbeknownst to others as well as in an overt fashion, one can safely say the intensity has changed.

Over the summer of 2007 Facebook spilled into the global scene, and expanded its user base to include many types of people beyond students (Lispman 2007c). Within the US various adult populations began to employ the network for post-college social grooming, such as searching out old classmates and as a sort of dating service and tool to sustain long distance relationships (Daily Telegraph 2008, Stevens 2008),¹¹ and the Web 2.0 and business community has begun to adopt it as a new job search and business networking tool (Rosenbloom 2008). After all, employers usually check up on potential employees online, why not overtly search on Facebook too? And the group that's probably roused the most ruckus is the substantial number of older adults, such as parents and administrators, concerned with watching youthful users.

Studies have begun to surface showing just how important Facebook can be in the production of social capital. For instance, Ellison, Steinfield, and Lampe (2006) have explored the influence of the SNS in terms of both bridging and bonding capital.¹² Results from a multiple regression analysis of a survey disseminated to the MSU undergraduate population indicate that Facebook has a significant impact on students' ability to maintain bridging social capital at college. General internet use, as compared, did not make a significant difference in determining social capital. The social capital scores of students who reported low satisfaction with MSU life and low self-esteem were most positively impacted by intensity of Facebook use. Interestingly enough white students were more likely to benefit in this way than non-white students, which when held in consideration with Mayer and Puller's (2007) finding that social networks did not show a great deal of connections between racial groups, could suggest a new disparity for digital divide research. Eszter Hargittai (2007) echoed this possibility in her work surveying student perceptions of SNS in finding that certain racial populations preferred certain networks more than others. Ultimately having more friends who use Facebook, using Facebook to connect with offline contacts, and using Facebook for fun accurately predicted rates and trends of bridging social capital, but not bonding social capital (Ellison et al. 2006). In short, students who use Facebook actively may have an advantage in regards to social capital, or more properly framed, the few not on Facebook will be at a relative disadvantage.

¹¹ Unfortunately I have no publication to specifically back what I'm saying, it's a little compilation of material from one of researcher danah boyd's answers to my questions at the ASIS&T annual conference.

¹² Find out more about controversial subject of social capital (and the bridging and bonding model) at Wikipedia: http://en.wikipedia.org/wiki/Social_capital, where numerous perspectives can be well represented.

This doesn't directly suggest that Facebook is the sole accountable factor for student satisfaction and well-being (in fact the students might not be on Facebook *because* they are fed up with school or depressed) but it does implicate it as a significant one. As Ellison notes in her paper's general discussion, the relationship between Facebook and social capital does not determine causation – students bring with them a plethora of connections and resources to the SNS environment and consequently take away new ones. The likely reality is that the two worlds are interconnected and coproducing of one another – invariably linked and dependent reproducing both weak ties, potential and realized, as well as strengthening social bonds.

Most publications, regardless of if they are news media or academic articles, fail to accurately capture the essence of these exchanges, nor do they often bring attention to the positive uses of SNS, just the nightly news doesn't talk about all of the good things happening on the same night of a crime. Yes, as we so often read in the newspaper or in privacy evaluation reports there are mishaps and negative interactions that occur as a result of Facebook. Little work has focused explicitly on what drives behavior on Facebook (both in terms of individuals and the system itself) and investigations into the intricate values and meanings within the system are deemphasized in the face of shocking (even if occasional or exaggerated) downsides. If Facebook has become a centralized and essential element of the college social engagement experience and provides a boon to social capital then it also likely also holds many other beneficial aspects and intriguing quandaries still yet unexplored.

Over time Facebook has experienced a complicated evolution of privacy controls and options outside of the initial separation of networks and original educational email ID requirement.¹³ Participants were initially only able to adjust what types of people (such as friends or faculty) could see their profile but these options were later expanded to include direct control over what areas were released to others, even down to a specific individual basis.

The privacy controls and expectations Facebook users have today were hard earned over time. The introduction of the 'Newsfeed' wrought a near-catastrophic response when user habits were published overtly for the first time to the general populace (boyd 2006). Users could logon and see exactly who their friend broke up with the night before and the pictures another friend put up five minutes ago. The community rebelled against this change levying all sorts of complaints and threats –

¹³ New registrants were originally required to use an email address ending in .edu, thus keeping the network closed to anyone without a university-based email account.

many of them even disabled their accounts in response. After a bit of a “calm down” (almost condescending) response by Mark Zuckerberg (2006), the solution came in the addition of more privacy options. Users were given the ability to adjust who saw information about them on the newsfeed and of what type. They could now customize their newsfeed to tell them about the activities and interactions of the people they cared most about. Despite Facebook’s relatively recent focus on addressing privacy concerns and fears in regards to the non-adult user population (Kelly 2007), which was likely in response to numerous complaints accrued over the last year and even a subpoena for information from the State Office of the Attorney in New York (Giannone et. al 2007), a new controversy exploded on the scene right around the time of this paper’s writing.

Beacon,¹⁴ a name that will forever live in infamy in the minds of Facebook privacy advocates, was a service meant to be invisible to general users that would keep participants informed of their friend’s browsing activities on the general internet (but only for sites that were participating). The main issue with Beacon’s deployment was that it was opt-in by default, and allowed no ability for users to opt-out globally. This effectively meant marketers, friends, stalkers, and really anyone in between could very plainly see a given user’s activities on websites such as Amazon.com. After a bit of a slow start MoveOn.org and numerous efforts by groups around the web including bloggers and petitions managed to capture Facebook’s attention and provoke an official apology from Mark Zuckerberg (2007). The difference this time, however, is that the effort wasn’t just on account of Facebook users, but to a larger media and web community collective (Stutzman 2007b). As Facebook has grown up into a large company they have become increasingly accountable for their actions. Previously they may have been able to quickly implement changes that posed a threat to user privacy without suffering any major repercussions, but because the audiences has moved so much beyond just the college student population this is no longer as possible. This is further evidenced in the increasingly diverse and customizable set of privacy controls—both for user profiles and application control.

2.4 | ORIGINS OF SUCCESS

Facebook’s omnipresence among college students is beginning to spread to new populations. The network is continually growing at a high speed internationally and the company itself has become a recognizable corporate presence. Its success and popularity relative to Friendster and LinkedIn (and in

¹⁴ Which officially dubs itself a business solution that “Enables your customers to share the actions they take on your website with their Facebook friends.” <http://www.facebook.com/business/?beacon>

some ways, MySpace) this author attributes to three primary factors: (1) a modular network organization built on pre-existing communities, (2) a concise and consistent but malleable and effective interface, and (3) a *Permanently Beta* structure.

Facebook is built on separate but similar networks capable of limited interaction with one another. The original foundation of the site was supported by college networks—during Facebook’s formation only people with valid university email addresses could acquire an account. This promoted the perception of a safer environment, dominated by undergraduates and with few unknown outsiders. Back in the early years, 2004 and 2005, Facebook was a place of openness. Fred Stutzman describes it as *“the perfect community, a digital place they felt so comfortable with that privacy didn’t enter the equation. It would have been as weird to use privacy in Facebook ca. 2005 as it would be to walk around with a bag over your head on campus today.”* (Stutzman 2008b). The community for the online connections was already in place offline, and students experiencing the transformation of college both want and need to meet new people. Combined with the consequential trust and thus high level of information exposure Facebook achieved a rather unique disposition. This is no mere trivial accomplishment. Studies at the time lent support to claims of a trust-filled network showing that compared to traditional methods of identity exposure, such as online directories, Facebook *“fosters a more subjective and holistic disclosure of identity information”* (Stutzman 2006: 1). Facebook bestows a broad definitions to friendship, and the distinctions become all the more essential because on the same college campus one has a span of friends from best to barely met. Other SNS such as LinkedIn and Friendster also have contacts—in many cases many of the “friends” on these networks have no consistent face-to-face relations with the person who “friended” them. It’s almost like an open internet rolladex, full of weak and strong ties, all of which can be categorized and mediated specifically if the user so desires.

Later, high school networks were added as students learned of the site from their older siblings and wished to become involved—indeed many students now meet each other even before coming to college by joining their college Facebook network as soon as they get their new email. As the first Facebook generations moved on to graduate the team introduced geographical and workplace networks (effectively becoming global) so that people could stay in touch in their lives post-college and people all around the world could start to weave their own Facebook webs. Nearly all of these real-world social networks were already in place; Facebook just extended their services to them with additional semi-

permeable networks. From the get-go users had easy access only to those people in the networks they belonged to, thus discouraging cross-network connections between strangers and fostering an impression of a safe digital space filled with just your friends and peers. The power of and comprehensive trust in Facebook, as well as its sustainability, is rooted in real world boundaries (college campuses, high schools, work places) and boasts greater possibilities of meeting the friends of friends. Back in 2005 the best calculated average mean per-user friend count for Facebook users in general stood at about 144, with a median of roughly 180 (Golder et al. 2005). The numbers dropped dramatically once you passed the 250 mark – however the averages overall have probably increased in time with the network. Regardless if one considers these numbers for a moment they are confronted by the immensity of the proportion. The *average* Facebook user has a social network of strong, moderate, and weak ties of over one hundred people. Everyone is connected—to Facebook and each other. Kevin Bacon had better look out.¹⁵ The closed network system (person from network A cannot view more than a thumbnail and name of person from network B) renders a perceptibly secure environment. Designed to match pre-existing community networks from the face to face world this network organization has been critical to ensuring Facebook’s success.

The contemporary youth population tends to access the internet in bursts and with multi-tasking—little time is spent in one specific place and many users perform more than one task at once, even without thinking about it consciously (Wallis et. al 2006, Azzam 2006). This kind of mentality impacts the way users view and access websites and thus many effective websites for this audience are designed to capture attention with feature-driven and easy to access interfaces. Facebook fulfills this need better than most: virtually every feature it contains is intuitively interactive in some manner and customizable. New features are added frequently (almost every few months) and users who find themselves bored quickly can always find something new, be it a feature introduced by the Facebook team or just an update to a friend’s profile or a new event. Applications provide a springboard for users to bring even more interactivity and customizability to their profiles and pages. MySpace and other sites can claim the feature driven functionality too, however none of these sites have a great deal of ease of use blended with modularity inherent to their design. MySpace in particular is infamous for its customization, which when placed in the hands of nontechnical, often untrained artistically (at least

¹⁵ Kevin Bacon is the subject of a trivia game entitled *Six Degrees of Kevin Bacon*, which is based on the idea that due to his long and relatively diverse screen career, any Hollywood actor can be linked to another in a handful of steps based on their associations with Bacon. See http://en.wikipedia.org/wiki/Kevin_Bacon#Six_Degrees_of_Kevin_Bacon.

professionally) users (presumably teens) results in messy pages with poor graphic layout, difficult to read and see combinations of color, and non uniform organization of information.¹⁶ There have even been contests challenging searchers to find the worst MySpace page.¹⁷ For the most part Facebook's interface themes stay consistent (easy to read, organized, etc...), while the content of its features do not.

The third major reason (postulated here) for Facebook's success is that its concept design is predicated on a *Permanently Beta* format. The term *Permanently Beta* was coined by Gina Neff and David Stark (2002) and refers to dynamic open-feedback motivated systems where the producer and consumer of a system or software become one.¹⁸ This means that not only can the system change, but it has always been changing, will always be changing, and this perpetual state of transformation lets the system achieve and ride trends and flows better than others previously known. User profiles, applications, networks and the connections between them are in a constant flux and this context creates a service that is not only natural to its users, but desired. Users are in many ways as in control as the system creators and moderators – the exact usages of the site are not defined and this purposed design is crucial to the network's success. The environment stands in stark contrast to the consistent and hegemonic forms of old media and marketplace dominated by hierarchy. This is not to say that all

¹⁶This is not to say the Facebook is necessarily better than MySpace. CMC researcher danah boyd suggests that the design of each system in many ways reflects its user audience. She explains that "*the look and feel of MySpace resonates far better with subaltern communities than it does with the upwardly mobile hegemonic teens*" (boyd 2007c). MySpace works well in allowing users to render flashy, confused, or deviant displays of profile information and its community capitalizes on this opportunity. Users replace their names with inside jokes and reports of their current status and yearn to find original ways to express themselves within the system. Facebook caters to a more textbook graphic layout and information management structure – which ought not to be judged as intrinsically superior but well positioned to serve the needs of its audience and thus successful. As the cost of entry into the world of media design drops dramatically we're likely to see a number of shifts in norms and expectations for the presentation of graphic media. These days virtually anyone can go create their own easy to manage website with Google Page Maker. While MySpace profiles might often be something like a web page tossed into a blender, they're quite possibly representative (on some level) of the new 'cool' in web design.

¹⁷ Check ZeFrank's July 2006 Ugly MySpace page contest at <http://www.zefrank.com/theshow/uglymyspace/> for a good laugh.

¹⁸ The concept knows many names, including interactive adaptive management, responsive organization, and more.

users have the same level of influence or power within a system but instead that it is distributed and determined differently than it may be in closed system formats. This notion is explained more extensively as it relates to Science and Technology Studies theory in *Cyborging of the Mind in a Permanently Beta Ecology* (Ginger forthcoming 2008).

2.5 | SUBSTANTIVE INFLUENCE AND SOCIOLOGICAL IMPORTANCE

One needs only to talk to any given American¹⁹ undergraduate student to unearth tangible, substantive cultural impacts of Facebook. Everyone has a story, or in all likelihood a whole manifold of experiences, narratives, and interpretations of the system. In some ways it's like a social local newspaper—only you can play with it. If language is a signifier of pertinence, then just as 'to Google' and 'to Photoshop' have become verbs in the vernacular, 'to Friend' and 'to Facebook' have risen to this status on account of Facebook²⁰. Students have assembled extensive investments in the system and many have developed dependencies²¹ in varying forms—communications and news, extension of personality, community awareness and involvement, and initiation and continuance of both personal relationships as well as group membership. Indeed, many students are learning to visit Facebook as much as email and update their Facebook status like they do instant messenger away messages. As mentioned earlier, these high usage patterns are a logical consequence of the bridge between offline and online connections (Ellison et al. 2006) and the relationship between the once mostly separated worlds has become strongly coproducing.

The potential avenues for influence are numerous, especially among youth in the US. Outside of science and technology studies, many subsets of sociology have traditionally considered internet technology as peripheral or incongruous. However, education and research have a great deal to learn from the incarnations, uses, interpretations and social movements of new media. As sociology concerns itself with informing people of the social shifts of the future we ought to pay attention to the influences Facebook will accrue, especially as it becomes nominally interlaced into the everyday life and expands its influences across the globe. Facebook echoes, extends, and may even transform the interactions of

¹⁹ And British and Australian and many other nationalities. Facebook isn't as widely spread or adopted in other countries.

²⁰ The terminology of course varies by social networking service. Users might "MySpace" one another or "Friend" one another there too. Other SNS are more formalized, like "adding contacts" on LinkedIn.

²¹ Not dependencies in the sense of Psychological addictions, but everyday typical social and communicative needs become dependent on Facebook.

the face-to-face world and has implications for the many social groups²² traditionally of concern to sociology. The ramifications of this claim insinuate that examination of Facebook ought to intersect with all subsets and variations of sociology be they areas like transnational studies and demographics or methodologies such as historical comparatives, content analysis, quantitative data collection, or ethnographies. Studying social networking services and Facebook are imperative to contemporary Sociological study.

²² Gender and sexuality, race and ethnicity, ability and mental illness, class and geography, age and education, and countless others.

3 | THEORY AND LITERATURE REVIEW

Of all the different and perplexing social abstractions sociologists have tackled over the years, the notion of identity is among the most emergent and contentious. Depending on which social science you consult, identity may relate to self-image and individuation or to ascribed and achieved social roles and the process of negotiating one's own place and meaning within a greater societal context. Or, as Abelson and Lessig (1998) define identity, it may be explained as *"a unique piece of information associated with an entity... a collection of characteristics which are either inherent or assigned by another"* (1) to which he later adds *"the skills that a person possesses can also become part of one's identity."* (5). Identities are fluid, and often times difficult to fit into a simple definition. Two people might share defining characteristics, such as being blond or female and knowing how to fly an airplane, but in practice their identities are never the same. Identity evolves over time and therefore remains in some state of constant change. You may always be identified as human, but go from young to old and naive to wise, depending on who is making the evaluation. This paper does not seek to postulate an all-inclusive definition of identity, but instead situate an understanding of it in relation to Erving Goffman's *Presentation of Self in Everyday Life* (1959). This paper discusses how identity appears in cyberspace, and consequentially in the realm of Facebook. It also reviews related literature, particularly those pieces dealing with identity, privacy, and impression management on Facebook.

3.1 | DEFINING IDENTITY

By addressing the perspectives presented by Adam Smith, Mead, Freud, and Lacan one arrives at two primary notions of the self: an internal perception and an external social identity (boyd 2002 summarizes this concept, which was also assumed by Goffman). We as human (sentient) beings all have a comprehension of self (self-concept), which is often understood through self-evaluations that involve consistent attributes (e.g. "I am enthusiastic"). In other words, one's internal identity consists of physical, psychological, philosophical and moral aspects of self (boyd 2002). This self-concept is a prerequisite (but distinguished from) self-consciousness (or awareness), which is a comprehensive sense of self that is dependent upon context. No aspect of one's persona is self-evident, however. They are demonstrated relative to other actors who serve as the basis of reflexive measurement. That is to say we can't really know who we are without comparing and relating ourselves to others. Our internal identity is assembled from history, experience, and interaction, which in turn gives rise to social identity as people group in various ways. Both the complex actor conveying a representation and the context in

which it is extant from the social ipseity (identity). The incessant and necessary interplay between the two worlds, which is retroactive, perpetual, and heterogeneous, is a fascinating dialectic. This duality can be likened to many other classic debates, such as situationism verses traits and motivations²³ or to structure verses agency.²⁴

Goffman (1959) addresses identity from a symbolic interactionist perspective by employing the metaphor of a drama, or the *Dramaturgical Perspective*. His work emphasizes the importance of social action, group relations, and context to explain the process through which identity is performed and constructed in everyday life. This dramaturgy is a process that is contingent upon circumstantial social constituencies. The approach seems postmodernist in thinking, as it asserts meanings are constantly redefined and there is no objective or completely valid universal reality that stands independent of people's social actions. It is also exemplary of microsociology, and though it does not employ methods of measurement such as ethnography, historical biography, or series of in-depth interviews, as might be seen in other research based on phenomenology. Goffman's work is one of truly insightful theory; its concepts find animation and application in this paper.

The whole metaphor hinges on the notion that life is in some sense a performance, or rather a series of them. The audience of these performances comes in two forms. There are those watching and interacting with the actor, and at the same time the actor is himself (or herself) an audience and the various members of the audience constitute actors—they are all *performing simultaneously*. Everyone is in some sense an actor and an audience and there are potentially an infinite ways to envision the relationships—it becomes all about the frame of reference. Goffman illustrates this fluidity and complexity of roles in discussing a variety of characters (e.g. informers, colleagues, spotters, etc...) thus indicating membership in the audience or as an actor (or on a team of performers) is predicated on specifically shared knowledge (secrets) and special relations (or lack thereof). Performers may not think of themselves as actors or even be intentionally performing, but *“when an individual plays a part he implicitly requests his observers to take seriously the impression that is fostered before them”* (Goffman 1959: 17). The reality (authenticity) of such performances may actually be entirely irrelevant or

²³ Situationism vs. traits and motivations: the debate over of how external situational factors relate to patterns of behavior, thought, or emotion that remain stable but differ by individual. It is unclear to what degree one factor matters more than the other, and to what extent they are intertwined and coproducing.

²⁴ Structure and agency is a question that many have weighed in on, including Simmel, Elias, Parsons, Bourdieu, and more. It is a question of how structural factors, such as race, class, gender, ability, and more relate to or mediate (or are mediated by) factors of agency such as an individual's capability and one's freedom of choice.

disconnected from their implications and effects. It is as the Thomas Theorem states, *"If men define situations as real, they are real in their consequences"* (Thomas 1928: 572).

Mediating interpersonal behavior to sculpt or sway audience impressions is not a new idea, in fact it has been around for centuries. Plato referred to the *"great stage of human life"* and Shakespeare is known for saying *"All the world is a stage, and all the men and women merely players"* (Shakespeare, *As You Like It*, act 2, scene 7) as early as the 17th century.²⁵ Goffman also followed this up by saying *"All the world is not, of course, a stage, but the crucial ways in which it isn't are not easy to specify."* (Goffman 1959: 72).

Actors must sustain their coherent selves (identity) and yet at the same time need to be flexible depending on the setting. Goffman brings together social roles, interactive behaviors, and expectations of audience in what is known as the *Front*. The *Front* is characterized by consistency and generalizability, which *"functions in a general and fixed fashion to define the situation for those who observe the performance. Front, then, is the expressive equipment of a standard kind intentionally or unwittingly employed by the individual during his performance."* (Goffman 1959: 22). People have an idealized vision of themselves in a social context—a conceptualization of what an interaction or situation should look like—and act accordingly. *"When an individual presents himself to others, his performance will tend to incorporate and exemplify the officially accredited values of the society, moreso in fact, than does his behavior as a whole."* (Goffman 1959: 35). The *Front* becomes *"a 'collective representation' in its own right."* (Goffman p. 27). This means there is some level of social consensus; others in the scene may even be interested in perpetuating an illusion for the sake of the ideal. For instance, if a student stutters during a particularly important presentation their peers may be willing to pretend this did not happen. Confrontation is usually a relatively rare front-stage action. A group may be united in cohesive fiction as much as social objectives or beliefs.

To achieve this idealized vision of identity within a given scene people *dramatically realize* (emphasize) aspects of themselves that they wish the audience(s) to take in. Goffman relates that the activity diverted to communicating ones character *"will often require different attributes than the ones being dramatized"* entirely (Goffman 1959: 32). This raises an issue because there is a point of conjecture between underlying motivations and actions; it is unclear if actors can derive intrinsic

²⁵ The idea of comparing these quotes is admittedly not my own, it was taken from the Wikipedia page on Impression Management (May 2008). http://en.wikipedia.org/wiki/Impression_management.

meaning (doing something for oneself; art for art's sake) or if all actions are for the sake of the audience (all art and its meaning is socially constructed). The process of self-maintenance (or lack thereof) in order to stay in character (in relation to social expectations) is referred to as *Impression Management*. People “*expect, of course, a confirming consistency between appearance and manner.*” (Goffman 1959: 24) and tend to think of a performance as genuine or fake and as a result, performers act on account of this. Obviously some people are more actively concerned with conforming to the goals of a specific group or society, eliciting the construction of deviance. Self-monitoring Theory (Snyder 1974) addresses the varying degrees to which individuals gauge themselves. It includes possible concerns for appropriateness of one's actions, use of social comparison information, the ability to monitor one's own behavior by situational context (broadly or specifically), and the various traits that impact this. Goffman also refers to the same concept in team dynamics, considering loyalty (to team and performance), discipline (dedication to role and self-control), and circumspection (choosing your audience, situation, or otherwise anticipating the environment).

The *Front* (identity) is mediated by the context in which performance takes place, including situation and audience. The situation is defined as one might expect—the social setting, denoted by scenery, props, and actual location. Later, however, in reference to team performance Goffman identifies abstract regions of operation, which are determined by the presence (and positionality) of actors and audience. He draws upon the analogy of a stage, which, as applied here, is in many ways is what's going on with both individuals and teams.

The primary region of the *Front* is the front stage where both performers and audience are present. The front may include elements or equipment that enable performance (as mentioned before) and these can be something tactile, such as appearance or a particular smell, or be performative, such as mannerisms. The back stage is where performers are present but the audience is not. It is a place where straying from an idealized character is welcome, or at least safe. The backstage is defined by the lack of a certain audience—their mere presence would alter the condition.

This comparison becomes an expandable analogy. A child with his mom at the movies might perform for his mom, presumably his audience. His back-stage would perhaps be when he goes to the bathroom alone or just thinking to himself in the darkness of the theater. His front stage would be his public actions that take place in her company, such as thanking the person who checks tickets. And yet at the same time the two together might be a family who performs for the audience at the movie

theater—namely all of the other patrons they interact with. They could for instance clap after the conclusion of the movie. Privately in the car on the way home they might have a back-stage context, where they can both discuss their real opinions of a film. Finally there is off-stage (or outside) which in the case of team performance, would be separate of the team, or in other senses, simply in a completely different context. The borders between the stages are therefore important because they mediate and define this entire system. Performers are interested in being conscious of and possibly controlling borders.

Interactions with audience rely on two modes of communication,²⁶ conscious overt expression, embodied most often through language seen in verbal or written communications, and covert cues, sometimes unintentional and sometimes purposed. Goffman (1959) expresses this as *“two radically different kinds of sign activity: the expression that he [a person] gives, and the expression that he gives off”* (Goffman 1959: 2). Belief in ones part or performance is important but difficult to discern. Congruence between the two modes becomes paramount in determining honesty and consequently confirming roles and identity. If an actor’s non-verbal or covert cues indicate one message and they overtly express another, then their authenticity is called into question. This will be revisited in the next section.

Performance and context ultimately drive the concrescence of prehensions during the emergence of ontological choreographies - the dance that is the construction of self and social identity.

3.2 | IDENTITY IN THE DIGITAL WORLD

As the internet became mainstream in the developed world during the 1990’s researchers investigated the various possibilities and implications it would hold for the social conception of identity. Two of the most famous were Sherry Turkle and Donna Haraway. Turkle investigated the potential for fragmented, multiple postmodern selves and surmised that *“computer-mediated communication can serve as a place for the construction of identity.”* (Turkle 1995:14). Haraway explored discursive feminist concepts such as affinity politics and oppositional consciousness through the idea of the cyborg and sought to reject boundaries such as those between man and machine (Haraway 2004). In many ways identity as we know it in an everyday sense could not immediately port to the web, much like it could

²⁶ This was altered and broadened somewhat from Goffman’s original explanation to allow for a more encompassing and accurate explanation; .

not be directly replicated in written form or over the telephone. By the end of the decade some researchers were addressing how the internet had encouraged the vision of identity as a sort of commodity to be valued, verified, and transferred (Abelson and Lessig 1998, Camp 2004). Others sought to dispel the negative associations that had begun to accrue regarding the online interactions that mediate identity and personality. One such pair was McKenna and Bargh (2000) who were among the first to assert (in response to popular opinion and fears) that the internet could have no single, simple effect upon all people, defining who they are in ways such as inducing loneliness or causing introverts. They instead explained that people use the web for all kinds of reasons and motivations and that it was not, like most technologies, inherently good or bad in terms of the kinds of interactive social effects it could have on individuals. Their article, *Plan 9 From Cyberspace: The Implications of the Internet for Personality and Social Psychology*, calls upon the works of dozens of authors to spot four major digital architectural differences that could alter the conditions in which identity works.

The first difference of architecture is anonymity. Be it determined through screen nicknames or software, it is easy to mask one's identity online. In many ways one may achieve this effect simply by being unknown to other users – a poster might even use their real name but if they're talking to people half way around the world they have never met (and will never meet) then they are just about as anonymous. McKenna and Bargh go further to explore the implications this has for identity stating, *"When an individual's self-awareness is blocked or seriously reduced by environmental conditions (e.g. such as darkness, presence of large numbers of other people, [the internet]), deindividuation can occur (Diener, 1980; Zimbardo, 1970).²⁷"* (McKenna and Bargh 2000). Though deindividuation is no longer widely supported by psychologists in general some social psychologists still believe anonymous persons are more likely to follow group norms or form a collective identity in place of an individual one (Postmes and Spears 1998). The net result of this effect may come in many forms, ranging from flame wars to helping to spread news about oppressive government regimes. Previous to the dawn of the internet anonymous synchronous conversations were uncommon, whereas on the early (and even late) web they were common among human to human interactions. By alleviating a sense of self or accountability

²⁷ Not read for this paper but cited by McKenna and Bargh:

Diener, E. 1980. "Deindividuation: The absence of self-awareness and self-regulation in group members." Pp. 209-242 in *The psychology of group influence*, edited by P.B. Paulus. Hillsdale, NJ: Lawrence Erlbaum.

Zimbardo, P. G. 1970. "The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos." Pp. 237-307 in *1969 Nebraska Symposium on Motivation*, edited by W. J. Arnold and D. Levine. Lincoln, NE: University of Nebraska Press.

people become more likely to act on the basis of situational cues instead of internal motivations (McKenna and Bargh 2000). Furthermore, the assurance of an obscured identity facilitates the temporary or recreational construction and portrayal of false personas or identities that are not truly ones own, what might be referred to as “Identity Tourism” (Nakamura 2002). Online (anonymous) people might feel safe enough to try out (tour) alternative ways of being, be it gender, race, age, or virtually any other social identity (Turkle 1995). This might be good, such as a developing youth feeling safe enough to come out of the closet in the digital world, or might be bad, like the white men acting on stereotypes and impersonating Asian Geishas in online games, as Nakamura describes in her book. All too often the characters constructed in the name of tourism are ones based on social expectations and archetypes and can be damaging to both the portrayer and portrayed, *“Certainly, the performance of identity tourists exemplify the consumption and commodification of racial difference; the fact that so many users are willing to pay monthly service fees to put their racially stereotyped avatars in chat rooms attests to this.”* (Nakamura 2002: 14). Much of this has changed from the early days of the web, however. While general forums and things like response threads to videos on YouTube still leave users as (deindividuated) anonymous beings, increasingly more websites do their best to tie identities to agents. The ease access and increased media intensity of the web as well as social norms have shaped this reality. Bloggers have profiles, people invest their offline-selves in dating websites and social networking, and countless photographers and artists (trained or casual) transport themselves visually (and in some cases through sound, like in podcasts) to the digital realm daily. Games like World of Warcraft still offer new spaces where fantastic identity tourism can easily take place whereas places like Second Life might encourage users to reflect aspects of their first-life selves. Anonymity still plays a role in shaping interactions on the internet, it’s just not as complete or clear (or as common) as it perhaps once was.

Anonymity ultimately raises the question of artificial intelligence. Sherry Turkle (1995) tackled this issue as computers broke into the aspects of everyday life in the 80’s and 90’s and became both non-threatening and normalized. If users were able to impersonate alternative identities online then computers might be able to do so as well. Turkle described countless scenes and exchanges in MUD’s and MOO’s where users impersonated other human identities, machines pretended (or were intended) to be psychologists or hockey players, and real people sought to be mistaken as chat room bots in order to be proxy to sensitive information. The line between living and machine could become blurred, Turkle states, *“Today, machines promise to learn in the world challenge us to invent new hybrid self-images,*

built from the materials of animal, mind and machine." (Turkle 1995:147). Indeed contemporary AI incarnations like SmarterChild²⁸ can fool many users and digital literacy may now include having a sense of digital identity (Ginger 2008a).

The second point discussed by McKenna and Bargh (2000) is the lack of a physical self online. In person our identity is constructed, in part, by instrumental physical characteristics and interactions involving non-verbal cues (somatic, tonal, accessory-driven). In many places online, from chat rooms to websites, this is turned upside down, so much to the point that people who meet online are more likely to like one another than if they had met in person. McKenna and Bargh (1999, cited in 2000) found that people who met first online walked away with a conception of the person they had just met that more closely resembled that person's own identified image. With services like Skype and social networking becoming more popular (not to mention those such as Second Life and 3D games) this disembodiment, as boyd (2002) refers to it, is less and less prevalent. It would seem that many people wish to extend their physical-selves online as much as their intellectual personas.

The third and related notion proposed by McKenna and Bargh (2000) is that of virtual space. Offline people often meet one another as a result of their close proximity, but on the web distance and space work come in variant forms. Locations are often conceptualized as web address (URL) or in the context of a specific program, and areas of the web (which may be considered or organized into zones) define groupings (exhaustive or not) of these in various ways (Kang 2000). The distance between these realms becomes more about time and access than it does literal proximity. Other variables, such as language and other skills clearly mediate this process, but on the whole it's possible for a person to engage in frequent interaction with someone very far away from themselves. The web also connects *more* people who might otherwise be physically separated. The extent to which people actually do look up strangers is a point of contention, but surely sites like eHarmony.com have capitalized on this facet of the architecture. Virtual communities have the capability of spanning continents and, perhaps with sites like Wikipedia and YouTube, languages and cultures as well.

²⁸ "Rather than mimicking human conversation (see [ELIZA](#), [PARRY](#) and [A.L.I.C.E.](#)), Smarterchild translates everyday-language User input into database queries, initially giving the user access to licensed content, such as weather forecasts, news and stock quotes and also included basic information retrieval tools such as encyclopedia entries, dictionaries, calculators etc. ActiveBuddy then introduced features beyond simple information retrieval and chat, such as setting reminders, notebook, and sending messages about crushes to other users."
<http://en.wikipedia.org/wiki/SmarterChild>

Finally, McKenna and Bargh settle on their last point of difference: the temporal context of the web. Online many communications are capable of being asynchronous and users are able to conduct many at once. Even in live chat sessions, such as AOL Instant Messenger, the social norms for some users seem to have adopted new norms of time management due to the web; users bounce from one conversation to another and other distractions without a feeling of heavy or immediate commitment that they might get if the same people were standing right in front of them. Online text-based communications are harder to interrupt vocal-based face-to-face ones and easier to think out because users can take the time to write out everything they wish to say. They also enjoy other advantages, such as being able to feel more in control and therefore more confident (McKenna and Bargh 2000, Mazer et al. 2007, Caplan 2003, McKenna and Seidman 2005). Persons plagued with social anxieties or who are lonely might find refuge in the internet temporal context but also run the risk (as they might in other ways) of spending too much time there. Time also finds itself significantly accelerated online. Since programs, patches, and optimizations come out so frequently the internet almost seems to age in dog years. Publishing books or even reports or articles becomes a furious and eternal exercise in catching up. Users learn to see elements as consistently unstable and never finished, or *Permanently Beta* (Neff and Stark 2004).

McKenna and Seidman (2005) follow up on some of the initially noted differences of digital identity in their chapter on *Social Identity and Self Online* included in the book *Cognitive Technology*. Like McKenna's previously mentioned work, this one draws upon the findings of dozens of authors. They note, among other issues, that boosts to self-esteem occur as a result of participation in identity-relevant groups online, but only when participants have high levels of involvement. More individuals are afforded access via the net, however and as such there is increased likelihood these groups have more potential when extended online. The chapter also gathers and presents some benefits of social identification online, such as increased self-acceptance, decreased loneliness, estrangement, and isolation, as well as increased social support and the strong potential for the formation of close lasting relationships.

One of the most immediate quandaries of the transition from face-to-face to digital existence is the essential but connotation-plagued and contrived issue of metaphor. Sociotechnical systems are fundamentally tied to the use of metaphor to make themselves accessible. Interfaces are distributed throughout and indivisible from their systems, monitor and control a reductive-oriented, indexical map

of separate elements of multiple (potentially infinite) states, and act as an associational structure that permit agents to manipulate, alter, create, destroy, and replicate processes and objects to which they are independent (Fuller 2003). The digital representation of identity, at root, must be tied to metaphor in its manifestation and interpretation. People cannot intrinsically understand the 1's and 0's that make up the operations within a computer; interfaces are designed to make meaning and symbols out of the data to convey information. This introduces all manner of limitations and potential avenues for reinterpretation (or misinterpretation) of identity. Systems are erected to verify or authenticate 'users' (who are also emulations of code) that pay special attention to attributes and authorizations to confirm or shape identity (Camp 2004, Nakamura 2002, Lessig 2006). Naturally this adaption is ridden with deficiencies—the spatial properties of the physical world do not often translate properly in cyberspace, save for virtual worlds like Second Life or World of WarCraft, and even those realities have substantial discrepancies when compared to reality.

danah boyd (2002) identifies two key variances in the configuration of cyberspace that distinguish social behavior online: The power of architecture (rooted in Lessig 1999, the context created by the digital environment) and the disembodiment (physical presence and space as discussed earlier). Architectural differences are mostly notably elucidated by what she terms a “collapsing of context.” Often less sociable information is available about a person (or place) and less is conveyed in interactions in cyberspace than might happen in the face to face world, whereas other types of information, that of a more numeric nature, such as time stamps, are more readily available. boyd further expands her explanation of collapsed context to include Zahavi's (1997) dual regard for signals. The first is an assessment signal, which is implicit and adjoined through observation and typically holds more weight in terms of reliability. The second is identified as a conventional signal, which is explicit and communicated through a medium that may heavily influence reliability. Since it is considerably more challenging to establish an assessment signal in most digital environments, users rely on conventional signals, and thus this restriction may diminish the reliability or authenticity of exchanges. Generally as ICT's have advanced, however, they have brought with them more ways to address disembodiment and more frequent and higher quality opportunities for conveying assessment signals. In some ways they may have even spawned new cues and signifiers in emergent contexts.

boyd also expresses an explanation of the digital context centered around the properties of mediated publics (boyd 2006, 2007a). Identity performance is couched in a different field of operations

in the digital realm because it contains four conditions that determine its demeanor. The first is the attribute of persistence. Communications made on the internet have the potential to remain forever inscribed in logs, web pages, and other forms of storage. Assertions between actors can therefore be asynchronous in nature. This also enables the second attribute, searchability. Permanently (or long-term) stored information means begs for indexing and organization and records of interaction can often be found with relative ease online. Google has created a miraculous access point to an immensely powerful and comprehensive database—an increasingly inclusive and collective human mind. Third she highlights replicability, that is the fact that most data is easy to copy with perfection. This poses issues for a multitude of issues, from forgery to copyright and ownership. Finally, boyd examines another side of anonymity. Audiences on the internet are in some sense invisible, you may never be quite sure for whom you are performing (in Goffman’s sense) while online. We construct our audiences, both real and imagined, with a certain degree of uncertainty unknown in the offline world. Generally day-to-day in person we have a pretty good idea who we’ll run into and who’s paying attention to us. If we walk down the street it’s relatively easy to see who’s looking at us, and even if someone watches us from a far we typically don’t actively divulge much of anything private or personal to them. Combined with the other aspects of searchability, replicability and persistence it becomes possible for invisible members of the audience to see our expressions and performances by anyone, anywhere at any time. Though boyd doesn’t explore the notion extensively, the role of the anonymous audience could play a very significant role in one’s role-taking and impression management. Not everyone really consciously thinks about the invisible audience, and those that do have to anticipate just who they are. In many places in Cyberspace this seems to be more like an art than an analysis.

The internet is far from the egalitarian utopia once pitched during its conception. Many individuals do not have physical access and others do not have the skills to operate web technologies (DiMaggio and Hargittai 2001). Still others do not have experiential access; perceived barriers to access (or usefulness or ease of use) play just as much of a role in preventing people from getting online as actual barriers (Porter and Donthu 2006). As a result, group identities belonging to marginalized or disadvantaged populations could be setback or hindered in the world of the digital. Even once people are established online studies demonstrate that gendered, sexual, classed, raced, and age-based identities and corresponding conflicts continue to be salient factors in determining the character of online relationships (Kendall 1998).

People who've grown up using the web employ skepticism when considering the norms of digital identity and possess learned skills to determine authenticity, much like they would in Goffman's vision of the everyday world. This is a form of digital literacy (Hawisher et al. 2004) and quite possibly an example of critical access (Banks 2006), which is increasingly becoming forefront in the humanities and social sciences ("Our Cultural Commonwealth" 2006). They learn what kind of behaviors to expect; they know better than to assume that the spam email about millions of dollars in Africa is real or to view a profile on MySpace as equally informing or valid as meeting that person face to face. It is not that offline identity is in any way non-imperative to constructing digital identity, it is that the performance of and way identity is ascertained online is subject to variant forms of expression, reception, and consequential construction. Facebook, as explained in the next section, unfolds new dimensions of the ontological choreography of self-awareness.

3.4 | IDENTITY ON FACEBOOK

The foundations of identity do not drastically change in the Facebook realm. The aforementioned dialectic of internal perception and external social identity remains strongly in place, but instead may be mediated in new ways. Facebook, as a mediated digital public, is often referred to in this paper as an ecology (as opposed to a system) in order to place emphasis on the heterogeneity of its actors and elements. It presents an ecology that quite aptly fits the dramaturgical perspective and microsociology and also facilitates high-level social analysis. Researchers can easily examine personal interactions as well as large-scale movements and trends, much like this paper looks at identity from a birds-eye view. Facebook's unique environment, massive student (and otherwise) populace, and countless interactive technical and social functions strongly shape how people present themselves, and in the crucial identity forming (and verifying) first of years of college, help to construct who they are.

The Facebook ecology is a complex mesh of performance if for no other reason that nearly everyone shapes the system while it in turn simultaneously acts upon them. This is not to say that this is any drastically different than normal life—on the contrary in a digital world where more often cues are collapses and contexts are constricted Facebook yearns to rival the complexity and nuances of offline life. Clearly like the face-to-face world some actors have more power or influence than others, but in the realm of Facebook this likely has more to do with a new hierarchy of factors. For instance, old age and experience might matter less and knowledge of humorous pop culture might matter more; young entrepreneurs can create amazingly successful applications or groups without business design teams or

years of social science research. Those who are popular may not be the most attractive or prestigious but instead be those who intensively invest their time online or find charisma through written text and skillful selection and use of pictures. Offline world factors most certainly mediate and alter how much influence a person might have on the Facebook ecology, such as owning one's own computer and having speedy access to internet, or belonging to a vibrant college network with many individuals who have enough common interest and goals to form a sense of community. The main point is that there are many points of influence in the ecology, inside and out, personal and social.

As mentioned in the introduction, participation rates among students are very high and users check in daily to dive into the elaborate arena of interactions. The boosts to self-esteem that occur as a result of participation in identity-relevant groups that McKenna and Seidman (2005) speak of are enabled by such user density and throughput. The invisible audience (boyd 2006, 2007a) is anticipated by most, and in reality is comprised of many different audiences, just like the face to face world. A person might have a stage in a group that corresponds to a real-world group (say a sorority) or their profile itself might be comparable to a stage. Further, with the increased customizability, users may even have several stages (Goffman 1959) within one big theater of performance, depending on the sections of their profile. Determining the authenticity of any given element in the system becomes similar to the ways we do it in real life. Just as a person might wonder if another's salary is really what they claim in the face to face world, they might be suspicious of pictures taken at funny angles and posted as profile pictures on Facebook. Many items are outright false and intended to be taken as so, but it's not always clear. The Thomas theorem raises the classic point: even if some students do not take seriously the happenings on Facebook, those that do will help to make the consequences of such happenings real. Talking to participants reveals many stories of misunderstandings—everyone seems to have an example of a time relationship status or wall post was misinterpreted.

Sherry Turkle (1995) may have spotted some insights back in 1994 that have come to fruition on Facebook. She notes that bars like the one on *Cheers* are no longer common place and that users may instead flock to virtual environments in the future. Indeed, as isolated middle-class suburbs, one-stop-shop stores and fast food grind away at human interaction people have been turning to digital communities to fill their social-capital related needs. Her warning, however, rings true perhaps even stronger than it did back then, *"But is it really sensible to suggest that the way to revitalize community is to sit alone in our rooms, typing at our networked computers and filling our lives with virtual friends?"*

(Turkle 1995:235). Undergraduates are now meeting each other on Facebook before they even come to school and rush home after events to post pictures of what they've done online. Turkle's words were really only a fear for an outlier population during the mid 90's (so few people were on MUD's and MOO's) but now with the vast majority of youth connected online in some way or another, could it be a real danger?

Facebook, however, does not really match most of Turkle's assertions from *Life on the Screen* (1995). Her studies were mostly of early adopters and outlying individuals, not of the mass-public adoption of digital publics. Most users are not particularly interested in playing out a different gender on Facebook and robots and AI on SNS are more often porn-advertisements and a nuisance. In fact they clog up MySpace so badly that it's almost impossible to accurately estimate the website's actual membership total. The site facilitates both tinkering users (with applications) and people who just want a transparent (in the new sense of the word, easy to see how it works) functional SNS. Facebook could, however, be the basis of a twist in the field of Artificial Intelligence. The idea of web3.0 and drawing upon massive dynamic information thresholds as databases might help to create a more effective hybrid AI. An agent like SmarterChild, but put out by Facebook, could access the actions and logged information of millions of profiled individuals, effectively creating a dynamic human-motivated AI. Such a system would have an amazing capacity to "learn" and pass the *Turing test*²⁹ by accessing pop-culture and the various other vestiges of irrational or unpredictable human experience.

Students take elements and fragments of their offline *Fronts* with them online, and create entirely new ones. The profile becomes a zone of dramatic realization, mystification, and the epitome of idealized self-presentation for some, and an exorbitant inside joke for others. The terrain of Facebook is mediated by its interface, which encourages, among other values, connection and community (Ginger 2007a, 2008b). There are various 'places' available on the system bounded by function and audience like Facebook pages, groups, events, applications, the Newsfeed, sections of one's profile—all of which may extend into, or connect to, one another. Individual portions of these places might be considered social artifacts or props, to a degree, as they can be manipulated to influence context.

²⁹ The *Turing test* is a simple but effective measure of an AI. If during an encounter with a given AI a human operator cannot tell it is a machine (and thus thinks it is human) then the AI is said to pass the test. http://en.wikipedia.org/wiki/Turing_test

Facebook fits boyd's proposition for a self-awareness enabling tool; that is an interface or system that provides data that *"goes above and beyond the magnitude of information that people have offline"* and would also be *"useful for users to be aware of what is out there about them."* (boyd 2002: 58). It does so by (implicitly) letting users know which applications their profile spans (the applications available on their profile is manageable, as well as the way their profile appears within them on other pages), by providing high-level data about issues of interaction pertinent to the user (alerts and the newsfeed), and by giving both raw data (say, total number of friends) and more useful impressions (a listing of all friends in a given group or a random pick of six thumbnail images of friends). Facebook is both compelling and functional, so much so that users invest a great deal of time and energy into it.

By acting as a rather successful bridge between offline and online relationships Facebook carries many natural social contexts with it. The automation and organization behind the interface is an impressive feat in information retrieval and sorts data in regards to temporal aspects (most recent news), relevancy to a given user (the information they care about, like their friends, groups, events, and applications), and all in a compressed but expandable fashion (just enough to not be overwhelming but with opportunities for delve into any single area). Above all, users can develop an accurate vision of their identity online, visualizing it and custom tailoring their profile to their heart's content. Users know who they are in the context of Facebook and can regulate their privacy settings and manage their profiles to ensure they create exactly the audience they would like to have. The complexity of the available privacy tools even allows for participants to establish profiles for multiple audiences. To top it off, the graphical interface that makes all of this possible is friendly, efficient, and malleable.

Cues can be given (or given-off) in multiple places on Facebook. The profile serves as both a representation of appearance, articulated in pictures and defined characteristics, as well as group identities, expressed through membership, as well as mannerisms, like posts on walls, status announcements, and chosen applications. Participant actions in applications, on pages, groups, and through the use of events can also overtly or covertly express identity. The Newsfeed might grab information that was overtly expressed (intended) for one audience, and pass it to another entirely. To sufficiently explain the nearly limitless opportunities for communication in the pocket-knife of functionality that is Facebook is beyond the scope of this paper, but there are many of the same methods of communication seen offline (you can give a gift, for instance), and other new ones (but that gift might just be a digital picture that costs a dollar).

Facebook does not fit precisely with McKenna and Bargh's points of a distinguished digital architecture. Anonymity is to some extent possible (making one's profile contain fake information or to avoid divulging much of anything entirely), but strongly discouraged by both norms and code. In fact, Facebook's terms of service require people authentically represent themselves (no one can pretend to be Superman) and, as mentioned in the introduction, Facebook's success is largely based on connection to real-world identities and communities. The system is built to help users connect to and interact with one another, new users with little information and few friends may find themselves with others pestering them to engage more so—Facebook asks friends of new users to help set them up with other new friends and interests.

Global groups and pages allow people to enter into a state of deindividuation, however, in the same way that a person can blend into a crowd in New York. In some ways the interface encourages both identification and freedom of speech—many actions on the site result in picture posting of an agent who is free to say what he or she likes. At the same time when participants are members of the audience they remain invisible, like walking around cloaked in the dark. In fact the terms “Facebook creeping” and “Facebook stalking” are perhaps as popular as “friending.” It seems to be common practice to look around on other people's profiles and watch their behaviors without letting them know. For instance, a given person can check on the conversations between their friends by examining their “wall-to-wall” exchanges³⁰ or take a look at profiles belonging to people they may or may not know based on Facebook's suggest box, “people you may know.” Many activities when compared to their offline counterparts might be considered creepy or unusual. There's no face-to-face equivalent of looking through another person's pictures on their Facebook profile to see what they do with their time, unless of course you broke into their home and found their photos. Other information exchange fits well into pre-established offline social norms, like relationship status. A user might publish their relationship status with the explicit intention of hoping others will see it and act accordingly, but would never want to say it directly (they'd be desperate or defensive). They might also be afraid to ask another user if they were seeing someone in person (both would know they asked) but suddenly online they don't have to know and the repercussions are different. Identities are of course revealed when interaction is to be had, but Facebook is the kingdom of the passive aggressive and introvert, and still in many ways ruled by the extrovert active assertive (who are able to have the most amount of influence

³⁰ A link available on the bottom of any wall post.

with the viral propagation system). The environment (events, groups, applications, and often connections and initiations) is knit by the assertive people, but yet at the same time is one where passive people can easily operate. Even if you were to know a person was visiting your profile or a group or event or whatever else you don't know what they paid attention to or how long they stayed. It's all a big complicated game of anticipation and guesses. Not unlike the face-to-face world in that regard, but students easily shift in and out of anonymity in an almost hybrid fashion.

According to the media and some academic studies, particularly those on Facebook, two expressly frightening audience members might be lurking in the invisible crowd: the authority (Jones and Soltren 2005, boyd 2007b, Hewitt and Forte 2006, Tufekci (2008), Thierer 2007) and the malicious (Jones and Soltren 2005, boyd 2007b, Acquisti and Gross 2006, Dwyer et al. 2007, Hogben 2007, Thierer 2007). Power has always played a defining role in any social structure or paradigm, and the digital publics are no exception. The use and abuse of power is an age-old question and one of its most important aspects is responsibility. Suddenly people not only have the ability to go online to inquire into the identities of people they know, but can do so without detection. Having the opportunity or free choice to carry out such curiosities does not bestow a right to observe, however, and public debate rages around the social norms of privacy online. Malicious agents might also gather identity information for spamming or scamming, or, in very *rare occurrences* (National School Boards Association 2007), predator related criminal activities. Rules and laws created to respond to these issues are far from effective or adaptive. Often authorities do not fully understand the digital systems they seek to administrate (Hogben 2007), and while commandments might work for submissive folk, they fail to copiously cultivate genuine understanding. This publication stands in harmony with danah boyd's assertion (2007b) that dialogue, the conversational process of learning to understand one another, is key to navigating the treacherous waters of digital identity management and arbitration.

Much of Facebook's success has been induced by its visual interface.³¹ Besides being user friendly and aesthetically eloquent, the interconnectivity and interaction between profiles and users is considerably tied to pictorial displays. Users are more likely to check out profiles of others with pictures they find attractive or interesting,³² often engage with picture galleries on a profile when possible, and

³¹ See appendix section 10.5 for screenshots.

³² The 2006 data set suggests this; about 40% of users often or always investigated pictures of people who had attractive or interesting pictures, and 77% of people often or always viewed pictures of a profile they were visiting (if available).

easily jump from one profile to another through profile picture thumbnails or by clicking on tags of users in pictures or videos. Indeed, the first thing viewed about a given profile in the return in a search queue is the picture. With its heavy reliance on pictorial representation the creation of a Facebook profile also helps to fight the feeling of disembodiment that afflicts digital travelers as they embark on their journeys through the web. Fragments of real world spaces can be indirectly mapped into the digital space through the use of pictures, audio, and video.

Facebook participants are still able to transcend distance, however. The Facebook system is built to emulate real-world barriers which are incarnated in the form of networks. Some of these might intersect, such as a person who goes to school and is part of both that school's network and the network corresponding to the town the school is located within. Distance in terms of time, however, is virtually non-existent, as Facebook performs quickly wherever access happens quickly—the limiting factor is one's internet connection, not slow servers. The website simultaneously gives limited access to a massive pool of unrelated individuals and encourages people to 'bump into' ones they might know through functions like "friends of friends." Language and culture become ways of creating distance or barriers between "locations" on Facebook as well, but with the advent of global groups the fact that the system is becoming increasingly enacting as a convergence of all of the functions of the web, more users are brought together on Facebook.

Facebook does seem to match the temporal effects described earlier by McKenna and Bargh (2000), and is built from the ground up as a *Permanently Beta* ecology (Stark and Neff 2004). Facebook also raises further implications in regards to boyd's (2007b) notions of persistence, searchability, and replicability. The entire system is built around search systems which are dependent on dynamic information. A person's profile could easily contain a track record of all of the groups they once belonged to, or it could be the latest and greatest modulation of their persona. Aspects of profiles and groups, as well as their actions are then refurbished and pressed up in the Newsfeed, which is entirely dependent upon replicability. Pictures become jointly owned as others are tagged to them³³ and applications thrive on passing media around the network; almost the entire system is built on viral flows of information.

³³ Anyone tagged to a picture may remove their own tag if they so wish, they don't have complete ownership of the picture but at least the system-recognized presence of their image within it.

Naturally Facebook, like the rest of the net, is a contested zone. It can be a place of discursive activity that might come in positive forms, like the expression of African American identity through AAVE that was sighted on Black Planet (Banks 2006), or in negative ones, like racist or sexist groups whose latent function is to keep majority groups in power (Ginger 2007a, 2007b, 2008). Participation in Facebook may be an example of the latest form of true experiential access to cyberspace for youth today (DiMaggio and Hargittai 2001) and those left out could easily be at a disadvantage in a college atmosphere (Ellison et al. 2006). The interface of Facebook is both visual and selective; some choices are unavoidable while others are unavailable. Users are able to give a variable amount of feedback in this regard as well as force alternative interpretations through agency manifested in groups, events, and deviant answers to Facebook's categorical imperatives. The encoded responsiveness of the system, however, does not bestow equal consideration to all types of users. Though anyone can build an application or start a group or event, not everyone has the motivation or education required for such efforts. The primary creators of content are likely those who are active³⁴ and those who are savvy.³⁵ These institutionalized aspects (possibly discrimination) allow for a certain brand of identity to be propagated on Facebook. So far a few social-analytic categories have been identified as ostracized by the system designers (Ginger 2007a, 2007b). Users are unable to fill in a category pertaining to their race, ethnicity or nationality nor are they able to indicate their "ableness" (in terms of mental illness and mental or physical disability/ability), though this sort of category would more than likely be abused and misinterpreted. The ways social identity is shaped on Facebook, in other words, could be similar to those in the face-to-face world.

Subsets of information science—such as information retrieval and relevance—beg the question of validity and reliability of data on Facebook. The ecology totes an interesting configuration of implicit information quality assurance (IQA). There are no official standards on Facebook outside of the user agreement which merely prohibits participants from putting up a fake profile.³⁶ Instead of formalized rules social norms operate as the primary agents of enforcement. So what IQA then, is employed? The interface of course limits the scope and type of data in significant ways. Users can only select an actual

³⁴ Based on the multi-year usage type data. When results were filtered for users who acted in more assertive ways the averages for activities such as posting media or communications were higher. In short it's also logical – the more active users who act more often are responsible for more of the content.

³⁵ In order to create a Facebook application one needs to be able to program and learn to develop on the Facebook API. Novice and uneducated users, probably something like 99% of Facebook, won't be able to do this.

³⁶ Facebook terms of use available at <http://uillinois.facebook.com/terms.php>.

numeric age (as opposed to “young” or “adult”) or display a major in school that really exists. The rest of the IQA comes in the form of participant policing of processes: tasks, roles, and social arrangements. The Facebook administrators serve only as a backup defensive line, responding primarily to questions and threats raised by individuals acting in the system and issues brought to attention by law enforcement agencies. Though there is some level of controversy as to how clear Facebook’s social norms are about a desired level of information quality, the system does have implicit rewards (positive externality: if everyone is truthful we all benefit) and explicit punishments (porn or harassment will get you banned). The ubiquitous status of Facebook (9 in 10 students have active profiles) facilitates high participation rates and seems to indicate a truancy in the *Collective Effort Model* (Kraut 2005). This model indicates that users perceive value in their contributions (they feel their time spent on Facebook is at least somewhat worthwhile and actions meaningful), have a feeling of commitment to the group (they log on often and participate intensively), and have strong and weak ties to other members (it captures all ranges of acquaintance, from barely to friends to best friends and family). Without these elements, the website would not be as pervasive as it is today.

3.5 | PRIVACY THROUGH IDENTITY MANAGEMENT

This paper employs a specific definition of privacy management in order to fully access and evaluate available literature on Facebook and appropriately frame a coherent point of reference. Whether defined by law, personal autonomy, democratic participation, identity management or social coordination an expansive understanding of issues should inform privacy policy discourse (Phillips 2004). Although most laws operationalize privacy as information that could lead to personal identification, the context and type of identification is not always forthcoming, and sometimes technologies force assumptions that are ideologically (value) laden. In many ways the common place notions of privacy incorporated in law and system design are out dated and appear antiquated when it comes to current social norms and socio-technical systems such as Facebook.

David Phillips outlines this struggle masterfully in his work *Private Policy and PETs* (2004) by unpacking the politics behind the inception, shaping, deployment, interpretation and evaluation of privacy systems. He starts by identifying four major privacy concerns: freedom from intrusion, negotiating the public/private divide, identity management, and surveillance. Freedom of intrusion is

noted by the creation of private and safe spaces, held away from public and authoritative eyes. The negotiation of the public/private divide is the subject of contention amongst feminist scholars, who believe the separation to be a cause of mistreatment which perpetuates imbalances in power. Identity management is the ability to limit and control exposure to, and relationships with, others. This is the type of privacy assumed in this study and by most Facebook researchers. Surveillance is a complicated theory based on Foucault's invocation of Bentham's panopticon and suggests that persons are disciplined to conform to social norms—the feeling that “Facebook is watching you”—and that this process “occurs overwhelmingly to serve the needs of capital, especially by normalizing and rationalizing consumer behavior in the marketplace (Gandy, 1993b).³⁷” (Phillips 2004: 695). It emphasizes dangers to individuals less and is more concerned with “the practices of creating and managing social knowledge, especially the knowledge of population groups” (Phillips 2004: 695). As a theoretical tool it applies to the management and potentially discriminatory or power disparity-ridden use of demographic and consumer-generated information to structure the lived world. This last notion of privacy seems to fit in well with the issues covered in *The Missing Box* (Ginger 2007b), where the withholding of racial identity information is cited as a way of helping encourage colorblind racist norms and external (often majority agent) assignment of identity.

Different privacy enhancing technologies (PETs) apply to each definition. For instance, encryption and PGP software aims to protect the end user from intrusion (the first definition), cookie clean-up and management work to prevent surveillance (the fourth definition), and Wikipedia might be an example of disputing the balance between public and private information in the feminist tradition. Facebook's Beacon component in many ways did not address surveillance social control, as it almost reduced users to something similar to the prisoners in the panopticon and became an almost malicious form of the invisible audience. Users were being observed by a party that they had no way of predicting or knowing about and Beacon in turn made decisions about them that negatively impacted their lives. Beacon was intended to be largely invisible and created for invasive use. Facebook privacy controls are clearly an incarnation of the second definition, as are most simplistic interfaces found on the web, like say check boxes on forms that allow users to opt in or out of sharing contact information with third parties. Unfortunately these technologies incur drawbacks as they are often complicated, do not correspond well (or adapt) to our multiple (that is, flexible by context) senses of self, sometimes involve

³⁷ Unread for this paper, cited by Phillips:

Gandy, O. 1993. *The Panoptic Sort: a Political Economy of Personal Information*. Boulder, CO: Westview Press.

deceptive contracts, and most of all, treat privacy as an individual's need and not a public good. Phillips calls for a recasting of social understanding of privacy in the US, explaining that most laws center on information that links to a person's body, but not information that describes them or is produced by their livelihood. What he advocates, is really the root of privacy control inherent to Facebook, a right to structure the world to our own desires with identity management.

3.6 | CURRENT VIEWS OF PRIVACY AND IDENTITY ON FACEBOOK

For the sake of space this work will only briefly overview the numerous but pertinent academic papers related to privacy and Facebook.

In a rare but welcomed break from the normal technical and law considerations of privacy Preibusch, Hoser, Gurses, and Berendt (2007) focus on the expanding bounds of privacy. They press the forth of Phillip's visions of privacy control, exerting that emphasis must be placed on the privacy needs of an individual's social network. They expand the previous duality of private and public data to include four levels: private, group, community, and public and express the ultimate policing of data on all levels to avoid unintentional sharing this data or misuse. While operating in a general context the whole publication fails to really understand the social norms of the Facebook audience. Users understand their information might be published on the newsfeed or that people searching for them might be able to see a list of their friends. They use these features and in many cases actually *want* this kind of interface, regardless of the level of vulnerability it may require. Facebook responded to both sides of this coin by introducing a nearly infinitely customizable set of privacy controls in 2008. Users can now specify the level of access give to an individual or exactly defined group, but they *do not have to*. Users who wish to remain open to wide-audiences or do not wish to bother with complicated controls a free from requirements.

Another group of authors, Dwyer, Hiltz, and Passerini (2007) attempted to compare understandings of privacy between Facebook and MySpace members. On the whole they found that though both groups were equally concerned about privacy respondents trusted Facebook and its members to a higher degree and felt more comfortable displaying personal information on it. The study also notes a crucial distinction in that willingness to share does not translate automatically into new social interaction and yet trust may not be required for the building of new relationships. We can see this qualitatively all of the time on Facebook. People friend one another without really trusting or truly

knowing the other person, and share plenty of information about themselves that may be irrelevant to fostering new friendships. This study is appropriate in that it does not seek to redefine or impose value judgments on insider definitions of privacy and sharing, but instead just observe them.

Perhaps one of the more famous and extensive evaluations of Facebook's system with regard to privacy is the hefty work by Jones and Soltren (2005). They fabricated a web-crawling bot (program; back in 2005 when these were possible), in an effort which they deemed to be the use of a *"threat model to analyze specific privacy risks."* (Jones and Soltren 2005: 1). In all, the work is exhaustive; it covers just about every nook and threshold related to privacy on Facebook that the authors could find at the time. The study didn't pay a lot of attention to the contained network nature of Facebook, however, and it did provoke response from Facebook, who reportedly altered their system to deal with the issues raised by the critique (John 2006). Though the piece is less relevant to this publication it does illustrate just how much effort has been placed into both policing and challenging Facebook's privacy systems.

A precursor to the Dwyer, Hiltz, and Passerini study, Acquisiti and Gross (2006) conducted a catch-all examination and evaluation of members and security on Facebook. They also found that an individual's concerns with privacy were a weak predictor of their membership in the network and that most participants felt safe using the system because they could control which information was conveyed in a public fashion. The study did unearth some misconceptions among members as to the reach and visibility of their profiles, however. Though their findings are reliable, they fall prey to the norm amongst these privacy studies: a lack of true (valid) understanding student's perceptions of the system as a whole. Privacy as a priority (how they refer to in the paper) is not held in comparison or conceptualized from the perspective of an undergraduate student.

An insightful and thoughtful quantitative-based Facebook scholar, Fred Stutzman has been looking at trends in Facebook since researchers first began studying the SNS. He pointedly follows the network on his blog, often updating it with new material every couple of days. In many ways his 2006 publication, *An Evaluation of Identity-Sharing Behavior in Social Network Communities* served as a precursor to this one, as it peered into more than just student perceptions of privacy and issues in the system, but also into the varied aspects of identity students were willing to share. His profile crawling program (back when Facebook would work with researchers) was able to amass a huge data set. This preliminary analysis gave a vision of a hierarchy of values in regards to what information students really sought to keep private, but didn't go into depth. Fred has presented at a number of SNS conferences

across the US and has informed SNS privacy policy studies (Hogben 2007). This study finds itself in debt to his original analysis.

Naturally all of the discourse related to privacy has found the ear of parents and educators around the country, and the National School Boards Association conducted a thorough study of social networking services in 2007. One of the biggest and most valid sets of data to date, they released an online survey to nearly 1300 nine to seventeen year old students and over 1000 parents and also conducted telephone interviews with over 250 school district leaders who formulate policy. They found that the often misunderstood social networking service sites were places of creation, learning and communication amongst students and offer unparalleled opportunities for educators. Students were active participants and wished to shape their experience and the system through a variety of activities, from uploading and downloading media to blogging and sending suggestions or ideas to websites. They assembled a typology of nonconformist users, noting traditional “influentials,” promoters, recruiters, organizers, and networkers. Since most schools are assigning homework that require the internet to complete, and nearly all of them have teachers who use web pages to communicate assignments and other pertinent education information social networking services ought to become a natural extension of these methods. Also, of paramount importance, was that the report found *“Students and parents report fewer recent or current problems, such as cyberstalking, cyberbullying and unwelcome personal encounters, than school fears and policies would imply.”* (National School Boards Association 2007: 5). Take pause and consider how drastically this statement refutes the vast majority of news publications and what it implies about the so-called security threats and privacy dangers so adamantly outlined in studies above. In fact most of the problems with students were of the everyday garden variety, such as behavioral and motivational issues. The report concluded by stressing that both parents and educators see social networking services as prosperous and beneficial for students, and even propose them as a requirement for social networking in school. In the end this is the kind of research that ought to be conducted on Facebook – with consideration given to privacy concerns, but with a higher and more important focus for a greater social good.

Exhibiting danah boyd’s exposition into Privacy and Facebook is vital to this study as well. In her essay on *Facebook’s “Privacy Trainwreck”* (2006) she approaches the issue of privacy from both an individual-centered and ethnographic basis, exploring just why the Newsfeed managed to anger users when the possibility for that kind of exposure was there all along. She notes how centralizing this data

and placing it in your face helps to direct the system in ways some users were not comfortable with. Furthermore, the gossip has the potential to go one way as a result of the invisible audience. Someone might be tracking your profile daily and even get a sense of building a relationship and understanding of your being, totally unbeknownst to you. This was possible before but now more than ever the Newsfeed made it easy. danah felt that this would ultimately open up a new channel for identity performance and alter the ways people orchestrated their impression management. The data in this paper spans the time before and after the newsfeed and allows for an assessment of her claim. Beyond this, a year later most people actually seem to like the newsfeed, now that they've developed a sufficient level of comfort and understanding. Those that joined after the switch over can't really imagine Facebook without it and don't seem to mind it a bit.³⁸

A rather refreshing perspective in the line-up of privacy SNS papers is that of Zeynep Tufekci (2008). She parallels the sentiments exhibited in this paper (though it was unknown to the author until just recently—turns out they were being written at the same time) in relating that students wish to expose portions of their identity through interactions and identity management. The paper calls upon the works of Goffman and Altman³⁹ to frame the presentation of self through the negotiation of digital boundaries. Her research finds that there is no relationship between student concerns with online privacy and information disclosure on SNS. They instead manage concerns with unwelcome audiences via adjustments to profile visibility and the use of nicknames, but not by restricting information within the profile itself. The paper unearths a number of findings about differing levels of identity sharing by gender, race, and corporate affiliation.

In October of 2007 ENISA, the European Network and Information Security Agency, released a comprehensive position paper on social networking and privacy issues that called upon the opinions of a dozen experts in the field. The contributors including many of those above and in fact six of the eleven key informants were from US-based corporations or universities, which means its findings are relevant to a US-based audience; much of their data and insight draws upon the experiences of the US population with SNS. The report, in essence, summarized all of the security issues on SNS to date. These included digital dossier aggregation (the downloading and storing of profiles by third parties), secondary data collection, face and location recognition, links to metadata, accounts resilient to deletion

³⁸ Or so preliminary analysis of the 2008 interviews would indicate.

³⁹ Altman (1975) *The Environment and Social Behavior*. Monterey, California: Brooks Cole Publishing.

(and residual effects), spam, phishing and viruses, SNS portals, the potential infiltration of networks, profile theft, stalking, bullying, and corporate espionage. Quite entourage if you consider it in total, but many of these threats are nothing new to the internet, they just find new forms on Facebook and other SNS. Clearly the report's explicit purpose is to evaluate SNS from a high-level security policy standpoint so it naturally neglects many insider perspectives and social norms that vary by SNS and community. It makes several recommendations, including (to name a few) awareness-raising efforts, reinterpretation of SNS and legal regulatory frameworks, increased transparency of data, more authentication, increased opportunities to report and counter abuse, a remigration of corporate and educational filtering of SNS, and research into emerging trends. All of the various topics captured in this report have implications for the construction (regulation) of identity on SNS, both now and in the future. It provides a collected and sober response to privacy fears, but really in many ways encourages readers to remain caught up with the details instead of addressing overarching understandings of privacy and participant wants and needs.

These studies are just some of those related to Facebook privacy. Hundreds of small news publications have been dedicated to the effort of discussing the same topic, often terrorizing readers with topics of pedophiles (Goodwin 2007, for instance) or tragedies. Even just a quick search of web news archives reveals droves of privacy and Facebook articles.⁴⁰ A content analysis of Facebook in the news is not the subject of this paper, but would make for another valuable (if not exhausting) study.

3.7 | BUILDING AN ALTERNATIVE PICTURE

This study seeks to examine Facebook and construction of identity from the perspective of user traits and behaviors, without concerning itself with the dangers and problems they *might* happen upon

⁴⁰ (April 2008) Search term 'Facebook privacy' – first two pages of results minus those belonging to the Facebook corporation itself: Sophos recommended privacy settings for Facebook, <http://www.sophos.com/security/best-practice/facebook.html>; Why Facebook employees are profiling users, <http://valleywag.com/tech/your-privacy-is-an-illusion/why-facebook-employees-are-profiling-users-316469.php>; Is Facebook Beacon a Privacy Nightmare?, <http://gigaom.com/2007/11/06/facebook-beacon-privacy-issues/>; Facebook Beacon Privacy Issues Worse Than Previously Thought?, <http://yro.slashdot.org/article.pl?sid=07/12/03/0656205>; Facebook's Privacy Default, http://www.huffingtonpost.com/david-weinberger/facebooks-privacy-default_b_72687.html; Facebook and your privacy, <http://www.zeldman.com/2007/11/28/facebook-privacy/>; Has Facebook abandoned privacy?, <http://blogs.zdnet.com/social/?p=282>; Suit accuses Blockbuster, Facebook of privacy law violations, http://digg.com/security/Suit_accuses_Blockbuster_Facebook_of_privacy_law_violations; Facebook faces privacy questions, <http://news.bbc.co.uk/1/hi/technology/7196803.stm>; Facebook Privacy, <http://epic.org/privacy/facebook/>; Facebook fires up IM, ratchets up privacy, http://www.news.com/8301-13577_3-9896860-36.html; Exclusive: The next Facebook privacy scandal, http://www.cnet.com/8301-13739_1-9854409-46.html; and many more I'm sure...

in their day to day lives. Just like someone walking down the sidewalk adjacent to a street is only passively concerned about being hit by a car this study tackles questions of student understandings and intentionality. The objective of this work is to move away from previous fear dominated news rhetoric and research and unveil a vision of identity, and its performance, management and construction.

Facebook presents a precedent in the evolution of expression and sharing—and consequently construction of—individual and group identity in cyberspace. As reviewed in the previous section, performance of identity on Facebook not only works differently than it does in the face to face world, but it is also representative of a change from how construction of identity has worked online in the past. Participants express aspects of their being both actively and passively in ways they cannot, or do not, offline or in traditional web-based services such as instant messaging, blogs, or even dating websites. Social networking services present an inevitable (but still evolving) future for the web, and their analysis is instrumental to contemporary sociological study.

The beginnings of this shift are strikingly illustrated through student perceptions of Facebook and can also be seen in thorough examination of activities where students construct identity through performance. This paper addresses how frequency and type of interaction on Facebook contribute to the exchange and definition of actor identity, as well as participant perceptions of the semi-patterned but fluid digital space. Most importantly, it points out trends that indicate students have altered their activities on the SNS as it has changed over time. Their etiquette and ethics online present compelling evidence of an awareness of not only the nominalization of digital identity exposure and management, but also of an alternative interpretation.

This work offers several novel contributions. First and foremost it utilizes a contemporary, flexible, and practical application of Goffman's (1959) *Dramaturgical Perspective* to understand everyday life and the meta-narratives telling the story of social forces in Facebook. Second, it offers a further exploration of the ways digital architecture influences the construction of identity. Third, this accumulation renders additional recent data representing the trends and usage behaviors of students on Facebook and contains some data leading to insight into student perceptions. These offerings are relevant to sociology from the perspective of new media studies, social capital and network analysis, virtual community studies, communication, marketing, education, social movements and epidemics, and more. The author personally hopes to ultimately enrich the sociological study of social networking services and our contemporary understanding of the digital domain.

Facebook is an integral facet of undergraduate student life, but collecting information on an occurrence as complex and intricate as the *permanently beta* dance of the socio-technical mesh isn't exactly straight forward. Faced with this challenge one ought to start at the beginning, with exploratory questions that lead up to potentially more ardent inquiries. Realistically, much can be observed and explored from a high-level statistical analysis, but to truly understand the events and happenings occurring on Facebook qualitative research must follow up the numbers. This study is designed to be an expedition, extravagant if not speculative, and definitely insightful.

The following questions are broad but important. They are informed by a blend of informal participant observation, previous literature, and Goffman's notions of identity and performance:

1. **How do people perform their identity on Facebook?** Who are the participants, and what are they like? What are some of the significant behaviors that indicate information is exchanged (or not exchanged) to confirm or assert identity? How frequently and intensively do they perform these actions? How connected are they to others on Facebook?
2. **How do users feel about the environment?** What are their expectations of the audience? Do they consider it a safe space? How do they see their own privacy and choose to operate?
3. **How do they manage their digital identity as compared to their face to face identity?** How private do they keep their profile and what aspects do they list? How does their sharing behavior compare to that in the face to face world?

This research considers patterns of human interaction, participation, and perceptions associated with various Facebook interface components, as well as the alteration over time of the system itself. The scope of this paper's analysis includes only quantitative research. The data was collected in an ongoing fashion; a blend of deductive and inductive analysis. In 2006 the questions were informed primarily by participant experience and fragments of performance that led to curious ponderings about the character of the place. Later in 2007 they became increasingly fueled by formal methods, a body of literature, and, of course, the findings from 2006. In all, this is not the sole way to deconstruct and interpret the data collected, but the findings do find validation through Goffman's theory. Most researchers approach quantitative study with a definitive theory in mind in order to secure matching (or mismatching) data. This project was not of that sort—and really given its somewhat elongated hodge-podge conceptions and initial constructions, could not be anything but a mixture of founding theory and experimental data.

The statistics employed in this work draw on the findings of two quantitative survey-based studies conducted on the UIUC Facebook user population. The first, collected in April and May of 2006, gathered responses from a convenience sample of 124 students (73 UIUC undergraduates after filtering). The population surveyed was far from representative, as it consisted of the responses to a mass invitation sent out to the author's entire friends list, approximately 700 people. Several surveys were released to this group and only two are accounted for in the extent of this paper. Participation was voluntary, anonymous and contained questions pertaining to usage trends and perceptions on safety, identity management, and friendship. The second survey was sent out over the summer of 2007 to a formal, randomly selected portion of the undergraduate student population. All respondents were full-time degree-seeking students over the age of 18.⁴¹ The decision was made to exclude part-time and non-degree seeking students after it was determined they were statistically more likely to be of a significantly older age and only comprise a minimal, outlier population at UIUC. In total the official university statistics department, the Division of Management Information,⁴² pulled an 1100 person sample randomly from the entire undergraduate student population. A mass email was then sent out to each of the selected participants and invited them to log in with their university ID to a secure survey

⁴¹ Students under the age of 18 could not be included for ethical reasons enforced by the IRB.

⁴² See www.dmi.uiuc.edu for more details.

form. No remuneration was offered nor were participants required to pay any money to participate. The response rate to this survey was very poor due to a survey response limit mistake⁴³ as well as the sheer length of the survey and technological limitations that prevented collection of partial or specific responses.⁴⁴ All told only 75 students (a pitiful 7%) fully completed the survey, which effectively means the data are not generalizable to the overall student population (to a statistically significant degree). Despite these shortcomings the two surveys, when paired together, present a number of interesting findings about the students observed that can be potentially confirmed via more in-depth quantitative and qualitative study. It is best to consider them a sort of scout work to inform future investigations and inquiries. In particular, the specific comparisons between Facebook and the face to face world reveal important untold intricacies of identity sharing habits in the Facebook user population.

Both the 2006 and 2007 survey contained some common components. They opened with inquires into respondent usage rates and types which not only gathered crucial information about the user but also spurred them thinking about their usage of the system in a comprehensive way. Both surveys went through a series of pages related to items such as social capital and perceptions and usages related to friends. In addition to this was another mutual section asking respondents about their feelings as to if Facebook is a safe place for various academic populations to display information. The 2007 survey delved into issues of race and Chief Illiniwek⁴⁵ on campus before coming to the next shared component, student uses of privacy settings on Facebook. After asking a series of general questions about student privacy settings each survey confronted the respondent with a series of similar questions relating privacy of Facebook identity components to face-to-face world portrayal of these components. Finally, both questionnaires gathered similar demographic information about their populations.

Comparison between these two surveys is inherently flawed. The two populations were collected differently (snowball vs. random) and neither is fully representative of the UIUC general student population, as was previously mentioned. While many questions between the surveys are identical, there are minor differences between a few, so direct comparison ought to be regarded as

⁴³ An ambiguous category for the number of responses was embedded amongst questions pertaining to per respondent limitations – I initially mistook it to be the number of times a single respondent could fill out the survey.

⁴⁴ The DMI required the use of a University-built survey builder application that did not allow for skip logic or multiple user pathways, nor did it capture responses of partially filled out surveys.

⁴⁵ UIUC's previous mascot or symbol, recently removed because of his racialized imagery and negative effect on the campus environment.

predictive and suggestive. Despite these limitations much can still be gained from examination of the data. However it is imperative that such data be employed as informative only to the extent of restricted exposure (limited experience) and a good basis for idea building around which to construct future surveys or speculative prognosis.

7 | FINDINGS

The data analysis explained here pays attention to three important dimensions of the Facebook experience. The first of these is an exploration into **user activity**, which is defined by frequency, type, number of ties to other participants, and intensity of use. The second section accesses some crucial participant **perceptions of safety and privacy** on the network. And the last portion looks into user **management of digital identity**, which is subsequently compared to similar manners of impression management in the face to face world. By considering the aggregate conjecture of the data we arrive at a conceptualization of construction of identity on Facebook.

7.1 | ACTIVITY

The first notable finding from both the 2006 and 2007 surveys was the sheer usage rate of the system. The 2006 survey was only sent out to known participants, and of the 2007 survey 73 out of 75 respondents (97.3%) reported an active Facebook account. Of students observed the vast majority (75% in 2006, 82.2% in 2007) were visiting at least once a day, many (34.7% in 2006, 45.2% in 2007) three times or more. See figure 1.1 for exact visitation rates. Unfortunately the number of times the user logs in gives little indication as to the amount of time they spend in the system, much less what they do there. It does, however, give us a hint as to how much they are invested in usage of the service. From this measure it can be safely postulated that participants log on frequently, which logically parallels the frequency as which they could (and do) perform their identity. The heavy shift of the average number of logins from 2006 to 2007 suggests users are using the system more frequently.

Figure 1.1 - How often do you visit Facebook?

2006	Count	Percent	2007	Count	Percent
			5+ times daily	13	17.8%
3+ times daily ⁴⁶	25	34.7%	3-4 times daily	20	27.4%
1-3 times daily	29	40.3%	1-2 times daily	27	37.0%
2+ times a week	14	19.4%	3+ times a week	8	11.0%
Once a week	3	4.2%	1-2 times a week	3	4.1%
Once every few weeks	1	1.4%	Less than once a week	2	2.7%

The frequency students updated their profiles was noticeably less than their login rates. As is probably apparent, the categories of measure in 2007 were very informed by those of 2006. The design also added the “don’t update option” to ensure an exhaustive category response set. It would seem

⁴⁶ Obviously the wording on the 2006 survey categories is not mutually exclusive; however respondents were only allowed to answer one item.

that students are updating their profiles less overall in the 2007 data set, possibly indicating a change in usage over time. Students are still logging on just as much (or more, really), but updating their profiles less often. *This indicate users aren't putting a lot of time into updating their profiles frequently, but instead are likely spending the time interacting with one another.*

It should be noted that the 2007 survey was launched before the addition of applications and an openly adjustable status section, which many users update frequently. In all likelihood the numbers would grow significantly if these were included in the update analysis.

Figure 1.2 – How often do you update any aspect of your profile on Facebook?

2006	Count	Percent	2007	Count	Percent
More than once a day	0	0			
Once a day	0	0			
Once every few days	5	6.9%	Once every few days (or more)	5	6.8%
Once a week	15	20.6%	Once a week	12	16.4%
Once every few weeks	43	58.9%	Once every few weeks	29	39.7%
Less than once a month	10	13.7%	Less than once a month	26	35.6%
			I don't update my profile	1	1.4%

So far we know that users are logging in often, and updating their profiles semi-frequently, but we don't know how they're updating, or what they're doing besides managing their profiles. To answer this question both surveys deployed a complicated, but comprehensive grid to gauge student usage tendencies. These behaviors give one measure of how information might be exchanged or asserted in ways that construct or perform identity. By assigning numeric values to the responses⁴⁷ a mean-average rating was established for each category, effectively illustrating the general popularity (measured by frequency of use) of a given feature. Between both years no category had a severe split (say 40% never and 40% always) and only a few categories had an even spread of responses (say 30% sometimes, 30% often, 30% always). Most had a bell curve where the median and mean averages were almost identical. Not all of the questions were directly comparable between the two years, the listing for the 2007 data-set was a little more condensed and representative. See Figure 1.3.

⁴⁷ Like most measures employed in the surveys, this question featured a range for responses: never, rarely, sometimes, often, and always, which were assigned points in a spectrum (never = 1, always = 5).

Figure 1.3 – When using Facebook you:

2006	Average	2007	Average
Investigate/view profiles belonging to friends	3.84	Investigate/view profiles or pictures	4.01
Browse pictures	3.88		
Investigate/view groups	2.66	Investigate/view groups or events	2.75
Investigate/review events	2.12		
		Investigate/view notes or posted items	2.23
		View news feeds (personal or general)	3.55
Search for friends	2.93	Search for people (profiles) or pictures	3.10
Search for groups	2.17	Search for groups or events	2.14
Search for events	1.58		
Check messages	3.74	Check, reply to, or send messages	3.40
Reply to messages	3.59		
Send messages	2.92		
Manage wall posts	2.60	Read wall posts	4.10
Make wall posts	2.97	Make or respond to wall posts	4.00
Poke other members (initiate)	1.79	Poke others (initiate)	1.99
Return pokes (reciprocate)	2.92	Return pokes (reciprocate)	2.82
		Create groups	1.56
		Create events	1.64
Post pictures	2.63	Post pictures	3.01
Check out advertisements	1.38	Check out advertisements	1.44
Look at the 'Pulse' feature	1.37		

The color-categorization above does not reflect a standard deviation measure, but instead follows the coding schema of popularity (1-5), with red items corresponding to the often range (3.5-4.5), blue items the sometimes span (2.5-3.5) and non-highlighted items the rarely (1.5-2.5) or never category.

Looking across the comparable categories most activities have stayed at approximately the same level of popularity for respondents. The only significant exception might be wall actions, which seem to have become more popular on the 2007 survey. Wall posting is an interesting method of expression in the Facebook realm. When users post to another's wall they are not just simply messaging or communicating with one another, but doing so in a semi-public fashion, making it a distinctly different kind of performance-based activity. The act of posting to another's wall is the only one that is (potentially) picked up by the newsfeed and easily visible to general public (people who visit your profile). In 2006 checking and replying to messages⁴⁸ was almost as popular as posting to the wall became in 2007. In order to make taking the survey faster the messaging question set was collapsed in

⁴⁸ The HP Information Dynamics Research group (Golder et al. 2005) found this to be one of the best measures of popularity and usage of Facebook. This data analysis indicates a continuation of intensive messaging and thereby popularity of the Facebook service.

2007 but one can reasonably expect that the differences between checking, replying to, and sending messages has remained similar between years. The remaining common usages were covert ones: browsing profiles and pictures, reading wall posts and messages, and following the newsfeed. Posting pictures and returning pokes are the only two occasional activities that are unconcealed. The remaining actions users sometimes take when logged on are hidden: Sending messages, searching for friends, and investigating or viewing groups and events.

As you can see, the most popular behaviors are those related to both direct and indirect communication and information exchange. Direct and purposed construction of identity (on-stage) comes in the form of 'public' actions such as profile updates, posting of pictures, and wall messages as well as hidden reciprocative actions (back-stage) like messaging and poking communications. Implicit influences on identity construction are carried out by the searching and investigating of profiles and pictures, distanced observations of walls, groups, events, and newsfeeds, and potentially read but unanswered messages (off-stage). Participants know others are looking at their profiles and watching the newsfeed and thus situate them in a context suited to their audience, allowing for a blend of influence strategies (impression management).

Pictures are often one of the driving features behind the whole economy of profile exchange. The ties between the physical and digital worlds facilitate a stronger representation of identity and help to combat feelings of disembodiment. Sharing through pictures may be less assertive, however, as viewing a picture does not actually notify the owner of the picture that someone is looking at it.⁴⁹ Users seem to browse (investigate) more than they actively and intentionally search for specific people, groups, and events in the system. The newsfeed, however, offers an interesting mixture of potential passive observation and indications of assertive behavior. Some items, like the breakup of a romantic relationship, group and application involvement, and status changes are also tagged by the newsfeed but were not included above in the collection of widespread routines. Many users fiercely regulate the newsfeed but the popularity of checking the feature indicates that it's become a viable, or at least accepted, way of sharing one's activities, constructing identity information, and otherwise communicating indirectly (and potentially unintentionally) with the mass. While people may not

⁴⁹ Unless of course they post a response or act by tagging someone in the picture.

purposely act to perform for the newsfeed they at least know that it's observing them⁵⁰. The fact that far fewer people initiate pokes than return them probably indicates fewer poke starters than people willing to engage in poke-exchanges. The most assertive activities, such as creating events, groups, and poking others as well as the ones least directly connected to people, such as viewing groups, events, the pulse, and posted items, were the ones of lowest occurrence. Advertisements were one of the least often engaged items on the system, which is perhaps not surprising, but nonetheless unfortunate news for marketing agents who feel Facebook is the best place to get their product to take off.

An obvious limitation to this activity tracking data is that applications are (and were at the time) totally absent. Future studies ought to include them, although this begs the question of how to best define their usage type and measure.

Compete.com also conducted a study in August of 2007 (Freiert 2007a) to determine what Facebook visitors were doing the most on the website. Their findings are consistent with those explained here though they did not include the same exact categories of activity. Only active behavior was tracked, and even within that wall posting was not examined. Their method of measure also differs significantly because it was not user-reported data but instead gathered by analysis of system statistics. Compete's results ranked browsing of profiles as the most frequent activity, followed by browsing pictures and interacting with applications. Interestingly enough Compete's analysis also included the time spent participating in each given activity, and when this is taken into account browsing profiles and interacting with applications rise to the top as the absolute most intensive and frequent activities.

So taking a step back, what does this say about the bigger picture? Users are logging in frequently and shaping the system, each other, and themselves by expressing themselves. They seem less concerned with continuously redefining or altering their image through direct profile updates, but instead by ***creating their own experience and subsequent residual effects*** through their behavioral actions. They overtly and covertly observe and interact with one another on stage, behind the stage, and off the stage through a variety of cues and in a still yet unexplained set of digital contexts.

⁵⁰ After the rocky introduction of the newsfeed feature just before this survey was released in 2007 users were eventually given an introduction and directions on how they might adjust it to their liking. They don't really know how to predict what the newsfeed will pick up and show to which people, however.

One aspect of any given context, as discussed in the theory section, is the audience observing (potentially or obviously) a person’s everyday life performance. A primary⁵¹ audience for most people on Facebook is their set of friends, that is connections to other profiles, that they have accumulated. Both surveys captured the number of *local* Facebook friends on the respondent Ullinois network list because this number is typically more readily visible and users are more likely to remember it offhand without looking it up online. It would certainly be interesting, however, to study the differences between users on a basis of the number of friends on other networks.

Figure 1.4 – Investment in the System: Number of Friends				
	<i>2006 Count</i>	<i>2006 Percent</i>	<i>2007 Count</i>	<i>2007 Percent</i>
0-50	4	6%	3	4%
51-100	15	21%	13	18%
101-150	15	21%	11	15%
151-200	19	27%	14	19%
201-250	9	13%	7	10%
251-300	3	4%	13	18%
301-350	2	3%	6	8%
351+	3	4%	6	8%

Figure 1.4 The number of friends is skewed to the right. The more real estate one consumes on the social graph (ie. The more friends they have) the more information they receive and the more propensity for influence they have. Thus it may be desirable to connect to more friends, and this is a likely motivation for growing friend counts. Alternatively, the growth could be as a result of more people joining the system as the years go on.

Figure 1.4 illustrates friend counts for the two years. The mean average number of friends in 2006 was 101-150 with a median of 151-200, while in 2007 this number advanced to stand between 151 and 200 (both mean and median). At first glance this does not seem like much of an overwhelming change but notice how the totals shifted from generally lower numbers of friends in 2006 relative to 2007. The dip found between the 51-200 range and the 251-300 range could be a result of the small sample or indicative of a two pronged graph. From 2006 to 2007 there is an overall reduction of friend counts in each specific category near the average, but at the same time the median shifts to a higher number. In other words the curve has flattened out and in general people have more friends.

The data here is difficult to use for predictive models as it applies to ranges of friends, not specific amounts. Assuming at least a consistent and average rate of growth by 2008 the mean average

⁵¹ All types of privacy management permit at least some friends to see a portion of your profile on Facebook, so we can safely say that at least some, if not all, of a person’s Facebook friends are sitting in their digital audience. We may not know which ones are there at a given time, however.

might look something like 201-250 friends. The median will likely shift as well, but not quite as dramatically, perhaps advancing to the same range of values as the mean.

The last (perhaps obvious) question in determining user composition is demographics. Both reports shared some similar comparative demographics collected at the end of the survey. Figure 1.5 details this information.

Figure 1.5 - Demographics

Feature	2006 count	2006 percent	2007 count	2007 percent
Male	24	32.9%	27	37.0%
Female	49	67.1%	45	61.6%
Freshman	18	24.7%	4	5.5%
Sophomore	20	27.4%	19	26.0%
Junior	19	26%	21	28.8%
Senior	16	21.9%	26	35.6%
5 th year+ Senior	0	0%	2	2.7%
Hispanic or Latino/a	2	2.8%	1	1.4%
American Indian or Alaskan Native	0	0%	1	1.4%
Asian	6	8.5%	0	0%
Black or African American	4	5.6%	6	8.2%
Native Hawaiian or other Pacific Islander	0	0%	1	1.4%
White	63	88.7%	65	91%
Other	1	1.4%	1	1.4%
* Numbers may appear inflated because of individuals who identified as multiracial				
Fraternity/Sorority	N/A	N/A	16	21.9%
Heterosexual	N/A	N/A	67	91.8%
Homosexual, Bisexual, or Other	N/A	N/A	5	6.8%

Clearly both years significantly more women than men answered the survey. One might theorize that more women are interested in Facebook in general, but a finding similar to this was suggested in Hargittai (2007) and later dispelled. Certainly women are more interested in answering UIUC surveys about Facebook, though. There seems to be no good explanation for the low Freshman count in 2007, as it was a random sample;⁵² the convenience sample actually is better distributed in this regard. Racial minority populations, with the exception of Black or African Americans, are

⁵² Even if it failed to have a good response rate the sampling the factors that would have impacted this likely wouldn't have included a small difference of one year of age among them.

underrepresented in both samples when compared to the school averages.⁵³ In response most of the data analysis with these variables was done in a less-than-graceful fashion by coding respondents as white or non-white. As compared to school averages fewer Hispanic or Latino/a, and Asian students responded. Fraternity and Sorority members made up a sizable chunk of the group, matching the school-wide statistic of about 20%. Sexuality data was only collected in 2007 via a complicated question set⁵⁴ and it seems that those of non-heterosexual orientation are underrepresented. In general the demographic data isn't particularly good for statistics, as there's too much homogeneity outside of gender and Greek status. Simply stated the numbers are just too small to really make any worthwhile statements. This was just another setback that resulted from the poor response rate (2007) and small total sample size (both years).

The 2007 usage data was explicitly geared more towards identifying more active, assertive users within the system. Some actions, like initiating pokes or creating groups and events, can be deemed highly assertive while others, such as returning pokes or reading wall messages, might be less assertive and more reciprocative. Some passive actions, like ignoring pokes or messages are not as well assessed here but generally less action among a user, especially performative, overt and public (observable by the user's audience) action, can be used to denote a more passive user. This idea inspired the creation of what is referred to in this paper as the *assertive-activity index*,⁵⁵ a measure of how active and publicly assertive a user is on Facebook. The number is determined from a collection of all relevant and comparable user behavior questions and weighed appropriately depending upon how assertive the action would be considered. Passive or normalized actions would receive a multiplier of 1, moderately assertive or primarily reciprocative actions receive a multiplier of 1.5, and very assertive overt, initiative-taking actions receive a multiplier of 2.0. Every question employed in the construction of the index was measured by a similar five point spectrum range of options: never, rarely, sometimes, often, and always. Figure 1.6 refers to how the questions mapped to each category. The resultant users could then be filtered and ranked by level of 'assertive-activity' and used in statistical analysis tests. For the scope of this variable I define the categories as the following:

⁵³ According to the Division of Management Information website (2006), the school average is 7% Latino/a, roughly 14% Asian, and 0.2% American Indian undergraduate.

⁵⁴ See the Appendix for the survey questions and the Facebook Project website for survey data.

⁵⁵ A preliminary attempt at typology, this study focuses in part on distinguishing types of user behavior.

Passive – The name of this category is a little misleading, as the term passive has multiple meanings in a general usage context. What is meant by passive behavior here are activities that do not involve visible reaction or noticeably active participation in the Facebook ecology. Generally this involves usages that include reception of information, as well as covert behaviors or non-identifiable or non-attributable actions. In the realm of Facebook this qualifies as activities that will not be tracked by the newsfeed or could be seen any way publicly. Users who perform these activities may or may not be doing so to remain unnoticed, but they certainly include people who wish to stay below the radar and refrain from interactive use.

Reciprocative – Somewhere between reception/observation and initiative-taking behaviors this category involves user actions that require a moderate amount of user interaction and/or assertive behavior. Typically the questions included here are ones that don't involve explicit initiative-taking action but could be visible to the general public. They might be conducted with the intention of being hidden from the public or directly engineered to be a display. Normally they aren't usages that run a high risk of rejection or poor reception. For instance, responding to another person's message or poke only reveals such a thing to the two people involved – it wouldn't be considered all that outgoing or assertive to respond. Posting pictures or searching out another person's profile are more assertive actions but privacy settings and the sheer frequency of such actions makes them by comparison more ordinary than outgoing or unusually initiative-taking. Inviting a person to "Facebook" you is less assertive, active, or outgoing than actually "Facebooking" them yourself, thus it's placement as a reciprocative action.

Assertive – The most assertive uses of the system are deemed as those that require direct initiation on account of members. The creation of groups and events, for instance, nearly always require invitation to other parties and require putting yourself out there for approval or acceptance. Poking or "friending" others is also a very assertive gesture. Some of these questions might be hard to place, for instance sending a message to a stranger could be considered assertive, but since it was a question that also included reading and responding, it wasn't categorized as so. Items were also categorized as assertive on account of how normal they are; few people create events, even fewer create groups, and people vary greatly in how often they will go to any length to friend another.

Figure 1.6 (next page) details the break-down.

Figure 1.6 – Determining the <i>assertive-activity index</i>	
Passive	When using Facebook you: Investigate/view profiles or pictures When using Facebook you: Investigate/view groups or events When using Facebook you: Investigate/view notes or posted items When using Facebook you: View news feeds (personal or general) When using Facebook you: Read wall posts When using Facebook you: Check out advertisements After meeting someone in person for the first time do you look them up on Facebook? Do you look up people on Facebook whom you have initially met in person that you are interested in romantically?
Reciprocatve	How often do you update any aspect of your profile on Facebook? When using Facebook you: Search for people (profiles) or pictures When using Facebook you: Check, reply to, or send messages When using Facebook you: Make or respond to wall posts ⁵⁶ When using Facebook you: Return pokes (reciprocate) When using Facebook you: Post pictures How often do you invite people to “Facebook” you as a method to keep up contact?
Assertive	When using Facebook you: Poke others (initiate) When using Facebook you: Create groups When using Facebook you: Create events How often do you initiate friendships (make a friend request) on Facebook?

Once scores for each question were totaled, weighted, and divided by the total number of questions used in their determination they were scaled to yield a result ranging from 0 and 1. The actual range was 0.43175 with a minimum of 0.30913 (half way between never performing an action and rarely performing an action) and maximum of 0.74087 (almost three quarters of the way between sometimes performing an action and often performing an action). The mean average *assertive-activity index* was 0.51167 and the median was 0.50595, indicating a skew to the left but because of the lower minimum (relative to the maximum) the curve hovered around the center option: sometimes performing an action. The resultant grouping was then split up into the three categories defined in figure 1.6: passive, reciprocative, and assertive based on the standard deviation. Since the variance was so limited (few users were very assertive and even fewer passive) the chosen measure was half a

⁵⁶ Perhaps a debatable placement, there’s no way to separate out response from initiation in this item. Considering wall posting is very common but often times employed as a sort of make shift public discourse thread and that it is easy to delete or modify I elected to place it in the reciprocative category. Any future typologies built around user behaviors should distinguish initiating a wall post vs. responding to one, among the other varied uses like status updates, application creation and use, social tagging or tag removal, and media sharing.

standard deviation in each direction from the mean,⁵⁷ resulting in about 38% of the group being qualified as reciprocative and the remainder falling into the other two categories.

It ought to be noted that the index does not directly measure a given user's knowledge of the system. To perform actions like create a group or poke another individual require very little physical or intellectual effort or background knowledge of such features. Generally the assumption is that all of the questions asked of participants are about tasks that they know how to do.

One of the most beneficial uses of the *assertive-activity index* came in the form of crosstab analysis. Several obvious sets of observations were derived from some initial comparisons through use of the Pearson Chi-Square test. In order to avoid errors as a result of cell counts tests were conducted with both the original variables in question and then followed up by recoded versions that condensed categories to ensure accurate results. The first run of tests, done with the tight range typology,⁵⁸ came up with no substantial results. The second yielded the following:

Null Hypothesis Set:

1. The assertiveness of users (score in the *assertive-activity index*) is independent of (has no relationship to) login frequency (login once a day or more vs. login less than once a day).
2. The assertiveness of users is independent of the frequency of updates (less than once a month, every few weeks, once a week or more).
3. The assertiveness of users is independent of the number of Facebook friends a user has.
4. The assertiveness of users is independent of a user's indicated race (compressed to white/non-white to avoid small-count errors).
5. The assertiveness of users is independent of a user's indicated gender.
6. The assertiveness of users is independent of a user's indicated sexuality (measured by a series of questions explained in the next section, split to hetero/non-hetero to avoid count-errors).

⁵⁷ Initially it was split up by a full standard deviation, but the number of people in the extreme ranges was too small to come to any conclusions. Right off the bat it is immediately obvious that most users are close to the same level of actively-assertive when using Facebook.

⁵⁸ One standard deviation in each direction; very few assertive or passive users

7. The assertiveness of users is independent of a user's indicated upper or lower class status (as in freshman/sophomore vs. junior/senior/older).
8. The assertiveness of users is independent of a user's indicated Greek (Fraternity or Sorority) membership.
9. The assertiveness of users is independent of how tightly a given user adjusts their privacy settings (privacy options in general, if they allow general access to their profile to their entire network, mediation of contact information, picture access and newsfeed).

Alternative Hypothesis Set:

1. The assertiveness of users is not independent of (that is, bears a relationship to) login frequency.
2. The assertiveness of users is not independent of profile update frequency.
3. The assertiveness of users is not independent of the number of connections (Facebook friends) they have in the system.
4. The assertiveness of users is not independent of a user's indicated race (compressed to white/non-white to avoid small-count errors).
5. The assertiveness of users is not independent of a user's indicated gender.
6. The assertiveness of users is not independent of a user's indicated sexuality (measured by a series of questions explained in the next section, split to hetero/non-hetero to avoid count-errors).
7. The assertiveness of users is not independent of a user's indicated upper or lower class status (as in freshman/sophomore vs. junior/senior/older).
8. The assertiveness of users is not independent of a user's indicated Greek (Fraternity or Sorority) membership.
9. The assertiveness of users is not independent of how tightly a given user adjusts their privacy settings (privacy options in general, if they allow general access to their profile to their entire network, mediation of contact information, picture access and newsfeed).

Findings:

1. The null hypothesis for the first two in the set can be rejected at a significance level of $\alpha < 0.01$. What's more is that absolutely no low-login rate users were classified as assertive users.
2. The null hypothesis for the last of the set can also be rejected, but only at a significance level of 0.05.
3. Therefore ***the frequency of a user's activity*** and the ***number of connections a user has to others in the system*** is related to the measure determined by the *assertive-activity index*. It stands to reason then, that the more assertive a users is, the more active and connected they will be, and the more they will shape the Facebook ecology.
4. The *assertive-activity index* ***could not be successfully connected to any demographic variables*** at any level of significance. Race, gender, sexuality, upper or lower classman status, and Greek membership all turned out independent according to Chi-square analysis tests. This result indicates that users of all sorts of analytic social demographic types vary in how actively and assertively they use the system.
5. More surprising is that the *assertive-activity index* did not seem to have any relation to whether or not users adjust their privacy options or if they allow general access to their profile to their entire network. It failed completely to link to adjustment of contact information or limiting of picture access, but came close on newsfeed adjustment (significant to the 0.105 level). It should be noted, however, that ***no assertive users left their privacy options unadjusted***. To relate the index to the various specific sections of profile exposure (say relationship status, religion, etc...) would have been too much complication for the scope of this paper and based on the insignificant returns on overall adjustment of privacy features might not matter.

This brings us back to the original question. Overall, participants have many opportunities to perform their identity on Facebook. They do so somewhat through profile updates, but mostly through activities such as wall posting, posting pictures, and perusing profiles. They are connected to on average to several hundred other members, which comprise a part of their audience. They are users of various types in terms of gender, race, sexuality, and have similar levels of assertive use. But how do they feel about the Facebook environment, then?

7.2 | PERCEPTIONS OF SAFETY AND PRIVACY

Even in 2008 with a Facebook open to the global public many people consider it to be the realm of college students. They by far and above remain the most active and immersed crowd, and thus control most of the flow of media and trend adoption in the system. The statistics informing this report did not thoroughly investigate student thoughts on Facebook as a place or environment. Instead both surveys inquired into a consistently hot topic: safety and privacy.

At the time of the 2006 survey Facebook was in the process of opening registration up to high school students, an event regarded as a catastrophe by many college-age participants. The resistance came mostly from a perceived conflict of ownership of space and the potential viewing audience. If Facebook was a domain of college life where students could express themselves freely in whatever outlandish styles they wished, then high school joiners presented a disastrous tattletale threat to the system. Suddenly everyone's immature, wide-eyed little brothers and sisters would be able to get a fuller picture of a world they'd only seen in glimpses before. Some worried that college students would take advantage of vulnerable high school teens, while others figured their little siblings would rat out their presented identities and lifestyles to their parents. As a result of all of the commotion around the admission of high schoolers into the system numerous groups⁵⁹ were erected to resist the change and otherwise raise awareness of the so-called grave threat. A year later with growing concern about the newsfeed⁶⁰ and introduction of applications or total free registration,⁶¹ are most participants even giving a second thought to high school users? They have their own networks just like everyone else anyway, right?

Turns out they still don't think it's a safe playground for the young crowd to play. The 2006 data demonstrate student opinions in the midst of the whole controversy. Respondents were asked if Facebook was a safe place high school and college students and later in 2007 for various academic-related populations. Figure 2.1 and 2.2 indicate the varied responses over the course of a year. The

⁵⁹ None of them gained sustained momentum, though dozens were formed: <http://uillinois.facebook.com/s.php?q=keep+high+schoolers+off+facebook&n=-1&k=200000010&init=r> with a mere 329 members at the time of this writing in the biggest of them: <http://uillinois.facebook.com/group.php?gid=2205058520>

⁶⁰ One of the larger groups on Facebook, running at 240,789 members the anti-newsfeed organization has become a place to discuss general issues with Facebook. <http://uillinois.facebook.com/group.php?gid=2208288769>

⁶¹ Again resistance in petition group form: <http://uillinois.facebook.com/group.php?gid=2209943517> with a solid 11,496 members at the time of this writing.

2007 responses were condensed from very unsafe, somewhat unsafe, not safe or unsafe, somewhat safe, and very safe into unsafe (both very unsafe and somewhat unsafe) and safe (somewhat safe and very safe), leaving out the central category of not safe or unsafe.

Figure 2.1 - Do you feel Facebook is a safe place for students to display information?			Figure 2.2 - Do you believe Facebook is a safe or unsafe place for: _____ to display information?		
2006	Yes	No	2007	Unsafe	Safe
College	50 (69%)	19 (26%)	College Students	(16) 22%	(46) 63%
High school	23 (31%)	53 (74%)	High School Students	(40) 55%	(18) 25%
			Faculty and staff	(20) 27%	(34) 47%
			Alumni	(14) 19%	(46) 63%

The data indicate that though fewer college students feel Facebook is unsafe for high schoolers, the majority still do. Interestingly enough, respondents felt both alumni and college students would be equally secure in the space, and what's more is that the number of respondents who felt Facebook was a safe place did not change all that much. In fact it only went down 4%, though the measures are not directly comparable. The mixed and spread response for faculty and staff seems to suggest that the survey takers could not make up their minds in regards to safety for the older adult academic population. The survey did not specifically define what was meant by safety, so it was left up to the respondent to determine this feeling for themselves, which ideally yielded a more representative and natural answer. On the surface it would seem that students really do feel safe, for the most part, in their dabbling in Facebook.

Student perceptions on privacy and Facebook tell a potentially oppositional story. After some campus climate questions on the 2007 survey I asked survey takers if Facebook was invasive (or not) to their privacy. Response options given were 'very invasive,' 'somewhat invasive,' and 'not at all invasive' to which 66% of users reacted to by expressing they felt the system was at least somewhat invasive and 32% felt it was not at all invasive. This suggests that students think Facebook is a safe place for college students to operate, but is still invasive to privacy. The contradiction of sentiments indicates two possible answers: either that students have a different level of tolerance of privacy invasion on Facebook or the invasion is a trade-off for a system that is otherwise worth it. An informed understanding of the user population would indicate that both of these notions are correct. Values of privacy, public spaces and performances, and exposure are different for students than in the face to face world (and other places on the web) *and* the system offers other benefits that outweigh the risks and threats it presents. In practice determining the line between creepy stalkers and simple Facebook

browsing is difficult; most students seem to have learned to negotiate the balance well enough to stay as involved in Facebook as ever.

7.3 | DIGITAL IDENTITY MANAGEMENT AND SUBSEQUENT EXPRESSION

So with all of the clamoring about in the news media picket line and scholarly cavalry, have students learned to adjust their privacy options more in just the recent year? Facebook has always been a balancing (or perhaps dancing) act when it comes to privacy via identity management, and from the looks of the data, have indeed reacted to the rush of new Facebook audiences and privacy advocates who might border on alarmist. And really for all of the worry participation rates and activity have only intensified as Facebook has grown and users spend more time logged in (Holathan, Hof and Ante 2007).

In 2006 only 53% of respondents surveyed altered their privacy settings, whereas in 2007 a much larger group, 86%, had taken to limiting their information data. Going one step further, 86% of the 2006 respondent group allowed anyone at their school (on their network) view their profile, as compared to the 2007 group, of which only 30% permitted everyone in their network to view their profile, the remainder let in only friends. For a simplified overview of information see table 3.1.

Figure 3.1 – Visibility Rates of Profile Components

Percents pertain to the proportion of users who have adjusted this aspect of privacy. This number is the percentage of *all users* (not just those who adjusted their privacy options) in the survey group adjusted this aspect.

<i>Inquiry</i>	2006 (%)	2007 (%)
Have you adjusted the "My Privacy" options for your Facebook Profile?	53	86
Do you adjust who can view your contact information?	51	64
Do you adjust who can view other information (wall, groups, friends, courses, etc...)?	37	N/A
Do you adjust what information the news feed can publish about you?	N/A	77
Do you adjust who can see your pictures?	37	64
Do you actively remove tags of yourself from pictures? (at least sometimes)	34	62

Across the board students became more limiting of information in general by 2007. In stride the number of users who allow for open profile viewing, only about a third of students did not limit who could see a given aspect (contact info, pictures, newsfeed) of their profile. These two actions would act in a telescoping fashion – fewer profiles are shared to the public network in 2007 and of the profiles shared many aspects are limited in their availability. The overall view gives one an impression of a community quite concerned with their digital identity exposure and yet comfortable operating in the digital commons.

7.4 | DIFFERENCES IN FTF AND FB IDENTITY SHARING

The next set of data analysis is tremendously and complex. Previous studies have polled students on the level of information they share on Facebook (FB) but without directly comparing the level which they share this information in the face to face (FTF) world. The way a member shares their profile controls which audience it is intended to be exposed to. In the Facebook ecology users have complex sets of links to other profiles, termed as friends, and each of these connections can be customized in regards to how often their actions show up on one's newsfeed, an indication of how they know other users, and also how much access they have to a user's profile. In general there are two big classifications of profile access typically adopted: full network (or some networks and all friends) and friends only. Those allowing for full network access could have people of just about any sort in a network come and visit their profile, whereas those with friends-only access only allow people whom they have approved through a formalized friendship tie.

The privacy management and categorization schema on Facebook is now considerably more complex. In 2008 the team released an update allowing users to adjust to what extent they share every section with custom-defined audiences. Nowadays a user could build a Facebook 'family' group and then allow them to only see whatever they wished, right down to specific picture albums or applications. Clearly all of this analysis is rendered less significant by this update but many users still do share items by network. The information below suggests relative sharing preferences which might still be true today.

7.4.1 | SO WAIT, WHAT IS A FRIEND ON FACEBOOK?

The definition of a Facebook friend is another debacle entirely. danah boyd (2006b) summarizes her ethnographic findings of the reasons people will friend others on social networking services as the following:

1. *Because they are actual friends*
2. *To be nice to people that you barely know (like the folks in your class)*
3. *To keep face with people that they know but don't care for*
4. *As a way of acknowledging someone you think is interesting*
5. *To look cool because that link has status*
6. *(MySpace) To keep up with someone's blog posts, bulletins or other such bits*
7. *(MySpace) To circumnavigate the "private" problem that you were forced to use cuz of your parents*

8. *As a substitute for bookmarking or favoriting*
9. *Cuz it's easier to say yes than no if you're not sure*

Suffice to say the process is complicated and perhaps worth an entirely separate study. The 2006 friends survey found that only 15.3% of respondents always accepted a friend request from someone they don't know, but this number has likely gone down with the increase in attention to privacy. Interestingly enough just over half of users at least sometimes felt bad when rejecting a friend request, giving a statistical backing to boyd's claims above. Only 12.7% of respondents indicated they don't reject requests. Beyond this 69.4% of users felt they had more Facebook friends than they had 'friends without considering Facebook'⁶². There was disagreement as to how many Facebook friends users considered acquaintances (as compared to friends).⁶³

For the extent of the research analyzed here the definition was kept simple. Respondents were asked if they would publicly announce information to a series of categories of association. The broadest were 'anyone' and 'other students' (2007 only) which were the two categories compared to those respondents who marked full-network access. The remaining categories, 'family,' 'close friends' (2007 only), 'friends,' and 'acquaintances' were then the basis of comparison to those who marked friends-only permissions. The determination ought to be sound because the likelihood that of a friend being in one of the ten of boyd's defined categories and in the 'anyone' or 'other students' category is relatively slim. It is also possible users might not list categories or announce affiliations because they cannot conceptualize or identify with them. Some might not have a concept of politics or religion (or perhaps relationships) but the possibility of this seems remarkably small, and thus, for the purposes of this report, is dismissed.

Results were then split between the two categories and individual identity aspects were compared. The survey would ask if a respondent shared a feature, such as relationship status, on Facebook and then ask them to whom they would publicly announce this feature, friends, family, etc... The profile aspects compared were relationship status, political views, contact info (in general) area of study (a basic option in 2006, a separated box in 2007), and religious views⁶⁴ and sexuality⁶⁵ in 2007 only. Due to the split in data several groups were particularly small making effective analysis difficult.

⁶² 'Friends without considering Facebook' was the chosen way to refer to face to face friends.

⁶³ Results indicated some variance in opinions and the question was phrased pretty poorly.

⁶⁴ The religious views category was added sometime after the 2006 survey.

7.4.2 | HOW STUDENTS APPEAR TO ACT ON THE SURFACE

Before any formalized statistical breakdown is reviewed take a moment to examine all of Figure 4 (next page) and consider the implications. Immediate scrutiny reveals some interesting notions, even if not statistically significant ones.

In general people from both 2006 and 2007 who share their profile with just friends have some similarities. Area of study, not surprisingly, was by far and above the most freely shared aspect of identity, however relationship status was also particularly high in the 2007 group. The rates of Facebook sharing were typically lower than the equivalent friends and family face to face world tendencies, save for of course the area of study category. Interestingly enough, however, the rates were about the same on Facebook as they were for acquaintances in both years. Area of study was of course the most forthcoming category both face to face and on Facebook, and most of the other variables came up in somewhat the same range, from 40% to 60% for Facebook and acquaintances and roughly 20% higher than those values for friends and family.

Those who shared their profile with the entire network relayed a comparable story. Once again area of study was open to most viewers (around 90% online and off) and sharing rates overall were generally higher for both Facebook and in person. In fact, outside of only two exceptions (contact information in person and area of study) most features were between roughly 50% and 70%. Relationship status also claimed an unusually higher rate of display on Facebook. For most respondents Facebook seemed on par with sharing face to face with other students or anyone, save for the major outlier of contact information. These basic observations aren't enough to fully verify the data, however. After making these introductory observations, several key investigations reveal some important findings.

⁶⁵ Not a specific listing this category had to be derived. The 2006 survey indicated that the majority of respondents felt that 'interested in' represented one's sexuality, but a significant number did not. The 2007 survey asked respondents if they listed 'interested in' and if so if they used it to represent their sexuality. Most did.

Figure 4.1 – Comparison of Information Sharing: Facebook Profile vs. Face to Face, All Network (percent)

The tables in blue below are for the survey respondents who allowed anyone in their entire network to view their profiles. The categories highlighted in blue indicate the directly comparable areas. Areas in pink are where sharing tendencies differ significantly. The area marked in orange is right on the border, and depending upon rounding may or may not be significant.

2006 All Network (23)	Relationship	Political	Contact	Study
Family	96	96	96	91
Friends	91	96	96	91
Acquaintances	70	61	39	91
Anyone	65	57	8	91
Facebook	74	65	68	91

2007 All Network (21)	Relationship	Political	Religious	Contact	Study	Sexuality
Family	81	76	67	90	86	71
Close Friends	86	76	71	90	86	71
Friends	81	62	62	71	86	71
Acquaintances	57	48	52	38	86	71
Other Students	52	48	52	14	86	71
Anyone	52	48	52	14	86	71
Facebook	71	52	43	68	91	77

Figure 4.2 – Comparison of Information Sharing: Facebook Profile vs. Face to Face, Just Friends (percent)

This pair of tables corresponds to the survey respondents who only permitted Facebook friends to view their profile. The portions set to a brown background are the cells to be directly compared. Again, areas in pink are where sharing tendencies differ significantly. The slightly darker brown stripe attached to the acquaintances row indicates a population that may only be partially comparable.

2006 Just Friends (16)	Relationship	Political	Contact	Study
Family	69	69	81	75
Friends	88	84	94	81
Acquaintances	38	69	56	69
Anyone	38	69	0	69
Facebook	56	56	56	75

2007 Just Friends (42)	Relationship	Political	Religious	Contact	Study	Sexuality
Family	71	64	60	88	91	62
Close Friends	76	69	67	93	91	62
Friends	74	60	57	81	91	62
Acquaintances	43	41	52	36	91	62
Other Students	43	41	52	12	91	62
Anyone	43	41	52	7	91	62
Facebook	83	43	38	52	95	57

7.4.3 | TESTS OF STATISTICAL SIGNIFICANCE

Some basic tests of statistical difference between proportions and confidence intervals for these differences were selected and run. An alpha of 0.10 was used to determine a basic level of statistical difference between the two proportions – a given face to face world group such as family or anyone and the Facebook indication probability. Of those who shared their profile to friends-only all cell counts examined were greater than 4 thus satisfying the basic requirement of $\pi_0 \geq 5$ and $n(1 - \pi) \geq 5$ was true for all comparisons. The all-network set was problematic in that the public sharing cells ('other students' and 'anyone') in both the 2006 and 2007 data had counts less than 5 but this indicates a trend nonetheless: those who set their profiles to full-network barely ever give out contact information to just 'anyone' or 'other students' in the face to face world. The following was assumed:

- *Binomial populations*
- *Null hypothesis: $H_0: \pi_1 \geq \pi_2$*
- *Alternative hypothesis: $H_a: \pi_1 \leq \pi_2$*
- *63 persons from 2007, 39 persons from 2006*

The standard normal (z) table shows that the lower critical z-value for $\alpha = .10$ must be lower than negative 1.28 in order to reject the null hypothesis of equal proportions. Any cells with a result lower than this are significantly different than one another. Further, a confidence interval test was run to determine the lower bound for the possible level of variation, and any results including 0 (potentially no variation) were thrown out.

7.4.4 | ALL-NETWORK SHARING

Only two notable disparities showed up for respondents who were set to all-network sharing. First was the potentially dismissible finding in the 2007 data set. The comparison chart number for relationship status was right on the border of the Z requirement (-1.268) and if rounding was consistently used at several levels of computation would come out to be marginally significant (-1.283). This would indicate a slight potentially significant trend for all-network people to be more likely list relationship status on Facebook than announce it to anyone or other students at their school (they were equivalent in this result pair). The 2006 data set did not share this feature, however, and given the

marginality of the 2007 measure it's not possible to state that students share their relationship status differently with any confidence.

All-network data sets from both years had a difference between sharing of contact information on Facebook and as compared to sharing with 'anyone' and 'other students.' Furthermore, the confidence interval test shows a slight possibility for a lower bound less than zero, meaning there might not be a formal difference as a result of the range. While the tests report this as a non-issue it can be stated that all-network students are possibly more likely to share contact info on Facebook than they would be to announce it publicly, but not significantly so.

One needs to take pause and consider this finding. The entire ruckus about students who share their profile and contact information to everyone has an important complication. They may be just as likely share this information with anyone in person as they would on Facebook, just as they do with most of their other more innocuous aspects of identity. *So approximately a third of the contemporary Facebook crowd might have a sharing disparity in regards to contact information, and the survey doesn't even indicate what types of contact information in particular.* This doesn't give a lot of power to the allegations that Facebook is a massively dangerous, contact-information sharing disaster.

7.4.5 | FRIENDS-ONLY SHARING

So how then, are the other friends-only users acting? It turns out that some of the sharing differences among this crowd are in fact statistically verifiable. The result, however is not a positive sharing disparity in regards to Facebook, but in fact a negative one. Users from both years are significantly more likely to share their political views and contact information with family and friends, and in the 2007 data set religious views as well. So instead of the panic inspiring issue of too much information sharing on Facebook compared to everyday life it would seem that in these areas there is actually substantively less. Even after running a confidence interval test the face to face friends category maintains its position of being a much more likely spot for the sharing of political views and contact info. This restraint of personal identity information indicates a different kind of trust in or perception of the system. Users must not be as forthcoming with this information online as they are in person for a reason – perhaps they don't want someone to get a poor impression of them from their Facebook profile. Interestingly enough, though not so surprising, but the media isn't talking about this group. *About two thirds of users are less likely to give out contact information about themselves online*

than in person, and they're already restricted which people they show this information to online in the first place.

Though not confirmed by confidence interval tests, relationship status also stands out as the only possible potential positive disproportion. In 2006 the item was shared less on Facebook than to face to face friends, but in 2007 it was shared significantly more to acquaintances. The shiftiness of this variable might evoke some support to theories of the changing social norms of Facebook – some researchers believe it is becoming more and more of a dating resource website.⁶⁶ If this change is in fact happening, then it might mean people are more comfortable admitting their relationship status on Facebook than they would be to announce it to acquaintances in person. Potentially the very same acquaintances could observe this information about them on Facebook, however.

Another importance nuance is what is *not* statistically significant in this picture. After running confidence interval tests the initially suspicious gap between sharing with acquaintances and on Facebook is revealed to be a non-factor. So in essence, people who share their profiles with friends are doing just about as much revealing of information on Facebook as they would with acquaintances in person, with the outlying exception of *maybe* relationship status. This indicates a congruency between digital and non-digital public spaces.

7.5 | BRINGING IT TOGETHER

The overall trend found amongst the profile aspect sharing data is that, despite a few exceptions, Facebook users share about as much in the digital world as they do with the equivalent populations in the offline world. People's values and ideas of what can and should be shared seem to translate pretty well from one to the other. The difference comes largely in the articulation and transference of such data. The online world gives an element of persistence (and therefore potential for replication and searchability) and the Facebook realm adds components of control (nonhuman agency) that result in unintended broadcasts of information. So in short, while a person might be just as willing to say they are single in person as they would be willing to say it on Facebook, it is nevertheless not quite the same. Announcing something like relationship status in person has a totally different connotation and level of assertiveness than is exhibited by simply posting the aspect on Facebook.

⁶⁶ An expectation as the older than 35 years of age crowds join the network. This claim is not founded upon studies but instead the talk observed among researchers online and at conferences.

Referencing a Facebook profile might be akin to talking to a person and asking them questions, but the whole covert orientation to the ecology dilutes the process. And people know this. Talking to Facebook users about what they prefer to put up online and find out about others reveals that this sharing process is complicated and quite intentional.

Variations in ecologies of human-computer interaction, however, are not intrinsically bad. Because it is beyond the scope of this paper, later works will follow up on the insinuation that the understandings employed by native users are different than non-native observers. Those who begin their life after the invention of a technology and grow up with it often think about that technology differently than the generations that experienced the introduction of that technology. danah boyd (2007b) stresses that the youth of today grow up in a networked world, where acquisition of information is performed through generalized peripheral information exposure (osmosis), having it actively shown to them (push), and by taking part in shaping and negotiating information itself (pull). Facebook, along with Wikipedia and other Web 2.0 technologies play an important role in information access, a fundamental part of the performative identity construction process.

8 | CONCLUSION

The analysis of the data lends support to several of the theories previously introduced and also brings about a few surprises. Nothing found amongst the results suggests that the fundamental notion of identity as an internal perception of self blended (or embattled) with a set of larger social identities is incorrect. The findings do indicate, however, that performance of identity happens on Facebook, and that nearly everyone is both an actor and audience in one way or another. People spend a lot of time working with their *Front* (in its many forms) by logging in often and keeping up their image via *Impression Management* accomplished by profile updates. The typical student has a pretty sizable potential audience but we do not really know who their true invisible audience (perceived or actual) consists of. Front and backstage performances are both present and prevalent; students communicate often with wall posts, messages, and pokes. They also spend a lot of time posting (and viewing) pictures, which likely indicates they aren't very concerned with anonymity and welcome the embodiment these visuals bring. They bring with them some sense of who should be in the theater (of stages) in the first place, as the majority of respondents in both years did not think Facebook is a safe spot for high schoolers (though we don't really know why or what they consider 'safe'). The data also indicate that users of all kinds are active. If this is true it could signify a challenge to the digital divide—amongst the youth race and gender may not matter in determining activity (and therefore a measure of influence) on Facebook. Interestingly enough students feel Facebook is invasive to their privacy, but not enough so to reduce their constant use of the system. It is also unclear as to if it is any more invasive than other aspects of their day-to-day life, such as living in a dorm with a number of roommates. With only a few exceptions, the level of personal identity information people share on Facebook is pretty similar to what they do in the face to face world. The relative similarity might be because of the reduced number of cues that normally result from the collapsed context of the digital terrain. Facebook resembles offline life more than almost any other system before because of its architecture and sheer membership.

We don't know *why* people are not listing certain categories, however. They may not have a religion to list, which is different than say, hiding contact information. We need to know the full scope and intricacies of participant motivations and survey studies cannot determine this easily. The Facebook interface is quite political itself. As mentioned previously, *The Missing Box* (Ginger 2007b) asserts that Facebook helps to create a colorblind perspective in regards to race, and also leaves out other variables

that might also seem not immediately worth mentioning. For instance, ability (or more often framed, disability) is an arguably important part of one's identity, but most able-bodied people do not realize their own privilege. Due to such a variance in physical and mental ability in human beings it becomes difficult to categorize. Adding a category on Facebook for ability would seem unnecessary to most people but beyond this how could it even be listed? Would users ever answer it in an authentic manner? The psychology behind the way users approach interface is a veritable labyrinth that's managed to found HCI, and should merit further study.

8.1 | LIMITATIONS

As was mentioned in the methods section the survey data employed by this study is severely limited. The first cluster was a snowball sample (the author's friends are prone to answer in response to him) and the second had a poor response rate. Neither set collected enough information on minority populations (outside of perhaps male-female) to do any reasonably good demographics studies. The research data clearly only reflects students, and of that those at the University of Illinois, Urbana-Champaign, who are students of a particular type.

And probably the most definitive drawback of all: many of the questions asked and theories (and factors of digital architecture) outlined earlier cannot really be effectively addressed with such broad sweeping quantitative analysis. Just about any issue or question explored in this paper could be better flushed out with interviews and ethnography.

8.2 | QUESTIONS FOR FUTURE RESEARCH

The process of this study unearthed too many questions to count. The limited scope of the project provokes several specific questions for future research, which are outlined below.

8.2.1 | PERPETUATION OF POWER ON FACEBOOK?

How does power and authority work on Facebook? What impacts does power have in shaping the ways users manage their identity online? Just who is powerful on Facebook? Could the interface empower some and be disempowering to others? The college students who answered both surveys said high schoolers would not be safe on Facebook, and to some extent neither would faculty. Does this indicate that they are the group in power, or perhaps an agenda at hand? Assertive individuals have

greater propensity for spreading knowledge through their weak ties. Could popular individuals who have power on Facebook exert or extend this influence into the face to face realm? Clearly power is an item of interest on Facebook. The invisible audience, sheer number of connections and their character, as well as other mediating factors such as interface and ties to the offline world all work into a complicated place where power might operate in variant ways. This notion would be worth exploring.

Power studies should not stop at the dynamics within Facebook or between users, however. This study goes into depth about the various privacy settings and forms of public information from the user perspective. The Facebook corporation, however, potentially has access to all of the data on its networks. Privacy laws prevent corporations from disclosing personally identifiable information without consent but with all of the information at hand on Facebook just how much can be used to identify someone? Surely picture and name are a basis but with all of the complex information invested in Facebook might there be other ways to identify someone? In a sense Facebook has a great deal of power and leverage over potentially anyone on their network. It's no secret that the data is used for marketing research, but what if it were sold to the wrong person, or if a hacker or the government forced their way in? What's to stop a company from taking a step too far? Facebook already openly states that *"Facebook may also collect information about you from other sources, such as newspapers, blogs, instant messaging services..."* (Stutzman 2008a). These sorts of problems have been around as long as record keeping has existed but in an ever increasingly complex world with corporations holding power and individual citizens who are ignorant, uninformed, or disempowered one has to wonder what is to come.

The question of data portability intersects with power in some interesting ways. Some users would like to encapsulate their information for use in other places, such as other social networks, email systems, or applications. The downside is that sometimes the data can get into the hands of the wrong people or mistakes might result in too much being shown. Unlike credit or background-check databases there's no formalized or special regulation service or standard for SNS private data (Stutzman 2008a). With hope as SNS becomes more and more understood and adopted by all levels and ages of society new forms of regulation, and more importantly, social norms, will arise.

8.2.2 | INFORMATION ORGANIZATION AND ACCESS

Given boyd's (2007b) mention of the new ways youth access information in the contemporary and intricately networked world, how can information scientists redesign systems to incorporate this? How can they track the way students think online? Website managers and the gauntlet of marketing researchers have probably already begun to investigate this but chances are academic information science could probably join in.

Looking at tagging trends and preferences on Facebook could be a good way to study offline culture. On Facebook how people do or do not want to tag themselves – how they remove them, add false tags, make jokes with them, use the tagging system in non-normal ways, and more all purport to render *Folksonomy*. Tags are prevalent as adaptive engineering; a picture seeder might set tags and these can be changed and others added. It is another such example of a negotiated process of relationships.

Though the closed-privacy setup of Facebook makes it difficult visualizations of social networks, connections, and social actions help unearth new findings. Accessing the ways users are connected to one another in different spaces, such as across the country, or modeling group formation and dynamics within different settings are uniquely possible on Facebook. Visualizations of crowd behavior and communications (say within large Facebook groups) could help contribute to scientific and abstracted models of human behavior and nature.

8.2.6 | SCIENCE AND TECHNOLOGY STUDIES POWERED RESEARCH

The author of this study would like to conduct a new survey or series of interviews explicitly designed to look at the way the interfaces, functions (both social and technical), and processes (of communication, information organization, and whatever else) *shape* the actors in the system, human and otherwise. It is yet unclear how they mediate interactions, influence identity, enable intelligence, or do what they do. An interface might shift or sculpt a human to human function or a computerized process might be mediated by a human actor, the possibilities are pretty wild.

The original version of this paper contained an entirely new and innovative identity theory set that, though ultimately was unrelated to the data analyzed previously, proposed two new concepts captured best articulated in another's words. In response to the author's ideas Andrew Shiotani

explained it (and it would be a disservice to not quote verbatim) in a conversation with this paper's author on held on his blog:

“Are these [socio-technical systems such as Facebook] extending personhood, providing new mechanisms for allowing a pre-constituted ‘person’ to operate across wider and wider socio-temporal contexts? Or, more radically, are they mechanisms whereby the very idea of the person is being deconstructed and reconstructed, such that these technologies are not only things we confront and use but become prosthetics of personality - i.e., obligatory points of transition, points of passage through which our inchoate ambiguous wishes, desires, inclinations, and thoughts must pass in order to condense or crystallize into more or less stabilized, concrete ‘personalities’? I’m not sure that we’re there yet, but there is an extent now where computers and laptops, e-mail, various software products, communication technologies aren’t merely things we use but our sometimes unreliable and frustrating partners who have a large say in defining who we are, in ways perhaps less subtle but more deceptively significant than the clothes we wear. Certainly, these technologies could disappear tomorrow and our bodies would still be here, and we would think our ‘values’ and our ‘identities’ as well. But we’d be living in a different society, and this would put our values and identities to very different kinds of what Latour calls ‘trials of strength.’” (Shiotani 2007)

In short we’ve invested ourselves in technologies, so much so that complicated ones like Facebook become an extension of our personality and identity. Facebook has a way of confirming (or really acting as a gatekeeper and authorizing) aspects of our selves. When someone loses a friends list they find themselves utterly disconnect from the digital side of life and might also actually lose contact with friends in the offline world. There is talk of Facebook making relationships ‘official’ instead of the other way around. The interfaces and social norms present in Facebook give it a form of nonhuman agency that is remarkably influential.

8.2.3 | THE POLITICS OF INTERFACE

The active elements of the Facebook interface are also of particular interest. The Newsfeed picks up on certain activities and in many ways remains out of direct user control. That is, they can influence what it shows them, and what information about them shows up on it, but not what it shows to other people or nabs from them. Applications might also operate on their own accord, as games and

simulations are involved and users aren't always familiar with the full extent of functionality when they sign on to one. And finally, seemingly insignificant, but actually vastly important, is the interplay of pictures—they are everywhere and people place a great deal of stock in them. Any given wall post or message or appearance of a picture might grab someone's attention – potentially more than any other component (lexical signatory content like names or words as well as abstract occurrences like tone). The set displayed on your profile is likely random, but others may be completely purposed. Network home pages give another source of public display including, group and event pulled from an entire network, as well as applications. Birthdays and status updates even go with the newsfeed and home page. More attention could be given to the active components of the interface when conducting studies on Facebook.

8.2.4 | COMPARISON TO OTHER DIGITAL INVENTIONS

Facebook seems to compare in some interesting ways to Wikipedia. As another collaborative effort system Wikipedia isn't based fundamentally on a face to face community, exactly, but is still successful, and houses lots of sub-communities. Both are free and created by anyone, but Wikipedia lays down official standards and has a definitive specific intended use, as opposed to Facebook's social norms (and encouraged uses). As Wikipedia states in its vision page⁶⁷ *"Imagine a world in which every single human being can freely share in the sum of all knowledge. That's our commitment."* Facebook seems to be in line with the same tradition, only with social knowledge and media sharing specifically. The two sites do differ very much in their emphasis on users, however. Facebook is all about individuals, whereas Wikipedia is all about information and disembodied (faceless) collective effort.

Facebook might be envisioned as a sort of web-based extension of an operating system. This notion falls in line with the continual convergence of functions in technologies today. With the addition of Microsoft API's and open application design people really could use the site for just about all of their software needs, from Ebay to photo websites to event invites, email, to creating websites for organizations, to blogging, dating, or just sheer entertainment. Someone could assemble their own personally customized office suite and link it directly into their social network. As more devices gain access to the internet Facebook will be explicitly designed for all of them (beyond phones and PDA's to

⁶⁷ No easy way to make this reference, just go look: <http://wikimediafoundation.org/wiki/Vision>.

TV's and screens in other places). This is a powerful and challenging vision, but incredibly profound as well.

8.2.5 | EVERYDAY MEANING AND PURPOSE

For all the numbers and speculation assessing the everyday *meaning and purpose* of SNS in student life cannot be done in this limited paper. As mentioned before the findings and their impressions can be employed to develop more effective and in-depth future studies. In order to fully address the theories and implications of identity, informatics, and interface introduced in this paper the author has assembled a new project comprised of interviews with students about the service. This study acted as a strong precursor to the work, and together they paint a more complete picture of identity on Facebook.

Details about this study and other research efforts on Facebook can be found on www.thefacebookproject.com, the author's research website.

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10.1 | 2006 QUESTIONS

The complete set surveys (there were several), their questions and findings are available online.

PRIVACY AND TRUST SURVEY

1. **How often do you visit Facebook?** (3+ times daily, 1-3 times a day, 2+ times a week, once a week, once every few weeks, less than once a month)
2. **How often do you update any aspect of your profile on Facebook?** (more than once a day, once a day, once every few days, once a week, once every few weeks, less than once a month)
3. **When using Facebook you** (never, rarely, sometimes, often, always):
Investigate/view profiles belonging to friends, investigate/view groups, investigate/review events, search for friends, search for groups, search for events, check messages, send messages, manage wall posts, make wall posts, poke other members (initiate), return pokes (reciprocate), post pictures, browse pictures, check out advertisements, look at the Pulse feature.
4. **Do you feel Facebook is a safe place for college students to display information?** (yes, no)
5. **Do you feel Facebook is a safe place for high school students to display information?** (yes, no)
6. **Have you adjusted the "My Privacy" options for your Facebook Profile?** (yes, no, not sure)
7. **Who can view your profile?** (everyone at your school, friends of friends, only friends, not sure)
8. **Which types of people can see your profile?** (check all that apply) (undergrads, grad students, alumni, faculty, staff)
9. **Do you adjust who can view your contact information?** (yes, no)
10. **Do you adjust who can view other information (wall, groups, friends, courses, etc...)?** (yes, no)
11. **Do you adjust who can see your pictures?** (yes, no)
12. **Do you actively remove tags of yourself from pictures?** (never, sometimes, always)
13. **Do you display your relationship status on Facebook?** (yes, no)
14. **To whom would you publicly announce your relationship status outside of Facebook?** (check all that apply) (family, friends, acquaintances, anyone)
15. **Do you display your political views on Facebook?** (yes, no)
16. **To whom would you publicly announce your political views outside of Facebook?** (check all that apply) (family, friends, acquaintances, anyone)
17. **Do you display address or contact information?** (none, some, most or all)*
18. **To whom would you publicly announce your address or contact information outside of Facebook?** (check all that apply) (family, friends, acquaintances, anyone)
19. **Do you display your concentration of study?** (yes, no)
20. **To whom would you publicly announce your concentration of study outside of Facebook?** (check all that apply) (family, friends, acquaintances, anyone)
21. **Do you display your courses?** (yes, no)
22. **To whom would you publicly announce your courses outside of Facebook?** (check all that apply) (family, friends, acquaintances, anyone)
23. **Do you have more than one profile at a single school?** (yes, no)
24. **In general, do you feel your profile has accurate information about yourself?** (yes, no)
25. **In general, do you feel other people's profiles are accurate factual representations of their personalities?** (yes, no)
26. **Gender** (male, female)
27. **Academic Status** (freshman, sophomore, junior, senior, 5th or 6th year senior, graduate student, alumni, staff, faculty)**
28. **Academic Institution** (University of Illinois, Urbana-Champaign, not in school, please specify)**
29. **Race/Ethnicity** (check all that apply) [help](#) (Hispanic or Latino, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, Other [please specify])

*This was recoded to none = no and some OR most or all = yes

**Filters were applied to remove participants based on these categories – those not at UIUC and those who were not undergraduates

PICTURES SURVEY

1. **How often do you visit Facebook?** (3+ times daily, 1-3 times a day, 2+ times a week, once a week, once every few weeks, less than once a month)
2. **How often do you update any aspect of your profile on Facebook?** (more than once a day, once a day, once every few days, once a week, once every few weeks, less than once a month)
3. **When using Facebook you** (never, rarely, sometimes, often, always):
Investigate/view profiles belonging to friends, investigate/view groups, investigate/review events, search for friends, search for groups, search for events, check messages, send messages, manage wall posts, make wall posts, poke other members (initiate), return pokes (reciprocate), post pictures, browse pictures, check out advertisements, look at the Pulse feature.
4. **Do you feel your Facebook picture is important?** (not very important, somewhat important, very important)
5. **Do you feel your picture is representative of your true appearance?** (completely, somewhat, not really)
6. **Do you think most people's pictures are accurate portrayals of their appearance?** (yes, no)
7. **When browsing through profiles will you investigate profiles of people with attractive or interesting pictures?** (always, often, sometimes, rarely, never)
8. **When looking at a person's profile how often do you view other pictures of that person (if available)?**
(always, often, sometimes, rarely, never)
9. **Have you ever removed a tag on yourself from a picture?** (yes, no)
10. **Gender** (male, female)
11. **Academic Status** (freshman, sophomore, junior, senior, 5th or 6th year senior, graduate student, alumni, staff, faculty)**
12. **Academic Institution** (University of Illinois, Urbana-Champaign, not in school, please specify)**
13. **Race/Ethnicity** (check all that apply) [help](#) (Hispanic or Latino, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, Other [please specify])

**Filters were applied to remove participants based on these categories – those not at UIUC and those who were not undergraduates

10.2 | 2007 QUESTIONS

1. **Participation: Do you have an active account on Facebook.com?** If your answer is no, please mark no and click here. [leads to thank you and dismissal page] (yes, no)
2. **How often do you visit Facebook?** (5+ times daily, 3-4 times daily, 1-2 times daily, 3+ times a week, 1-2 times a week, less than once a week)
3. **How often do you update any aspect of your profile on Facebook?** (once every few days, once a week, once every few weeks, less than once a month, I don't update my profile)
- 4-18. **When using Facebook you** (never, rarely, sometimes, often, always):
Investigate/view profiles or pictures, Investigate/view groups or events, Investigate/view notes or posted items, View news feeds (personal or general), Search for people (profiles) or pictures, Search for groups or events, Check, reply to, or send messages, Read wall posts, Make or respond to wall posts, Poke others (initiate), Return pokes (reciprocate), Create groups, Create events, Post pictures, Check out Advertisements
19. **How many Ullinois Facebook Friends do you have?** (0-50, 51-100, 101-150, 151-200, 201-250, 251-300, 301-350, 351+)
20. **How many of the people listed as friends on Facebook do you consider friends outside of Facebook (in 'real' life)?** (none, less than half, about half, more than half, all)
21. **Of your friends on Facebook, how many would you consider acquaintances?** (none, less than half, about half, more than half, all)
22. **You have filled out the 'How do you know this person?' information on:** (none, less than half, about half, more than half, all)
23. **Do you believe race or ethnicity impacts the number of friends you have on Facebook?** (yes, no, don't know)
24. **Do you believe gender impacts the number of friends you have on Facebook?** (yes, no, don't know)
25. **Have you met people first on Facebook before meeting them in person?** (yes, no)
26. **After meeting someone in person for the first time do you look them up on Facebook?** (always, often, sometimes, rarely, never)
27. **How often do you invite people to "Facebook" you as a method to keep up contact?** (always, often, sometimes, rarely, never)
28. **How often do you initiate friendships (make a friend request) on Facebook?** (always, often, sometimes, rarely, never)
29. **Do you look up people on Facebook whom you have initially met in person that you are interested in romantically?** (always, often, sometimes, rarely, never)
30. **What is your comfort level indicating your relationship status on Facebook when (if) you are in a relationship?** (more comfortable, no difference, less comfortable)

31. Do you list your significant other as such on Facebook? (yes, no, I'm not in a relationship)
32. Do you believe Facebook is a safe or unsafe place for: College students to display information? (very safe, somewhat safe, not safe but not unsafe, somewhat unsafe, not at all safe)
33. Do you believe Facebook is a safe or unsafe place for: High school students to display information? (very safe, somewhat safe, not safe but not unsafe, somewhat unsafe, not at all safe)
34. Do you believe Facebook is a safe or unsafe place for: Faculty, and staff to display information? (very safe, somewhat safe, not safe but not unsafe, somewhat unsafe, not at all safe)
35. Do you believe Facebook is a safe or unsafe place for: Alumni to display information? (very safe, somewhat safe, not safe but not unsafe, somewhat unsafe, not at all safe)
36. Do you believe Ullinois Facebook is a friendly or hostile environment for minorities? (very friendly, somewhat friendly, not friendly but not hostile, somewhat hostile, very hostile)
37. Do you believe the University of Illinois campus in general is a friendly or hostile environment for minorities? (very friendly, somewhat friendly, not friendly but not hostile, somewhat hostile, very hostile)
38. Do you believe Facebook is a friendly or hostile environment for Native Americans (Indigenous Americans)? (very friendly, somewhat friendly, not friendly but not hostile, somewhat hostile, very hostile)
39. Do you believe the University of Illinois campus in general is a friendly or hostile environment for Native Americans (Indigenous Americans)? (very friendly, somewhat friendly, not friendly but not hostile, somewhat hostile, very hostile)
40. Do you think Facebook is invasive or not invasive into your privacy? (Very invasive, somewhat invasive, not at all invasive)
41. Do you belong to any Anti-Chief Facebook groups? (yes, no)
42. Do you belong to any Pro-Chief Facebook groups? (yes, no)
43. In regards to the Chief, how would you identify yourself? (pro-Chief, anti-Chief, Undecided, no opinion)
44. Did you change your Facebook profile picture to the Chief symbol/icon or a picture of the Chief in protest of the decision to retire Chief Illiniwek? (yes, no)
45. Have you changed your Facebook profile picture to any other Chief-like looking symbol/icon such as 'Shoop Da Whoop' or 'Support the Chef' [Chef as in culinary expert]? (yes, no)
46. Have you changed your Facebook profile picture at any point (pre or post decision) to the Chief symbol/icon with the words 'Racial Stereotypes Dehumanize' written over it? (yes, no)
47. Do you have any Facebook friends that you know identify primarily as Native American (Indigenous American)? (yes, no)
48. Do you have any friends you know personally outside of Facebook who identify primarily as Native American (Indigenous American)? (yes, no)
49. Have you adjusted the "My Privacy" options for your Facebook Profile? (yes, no)
If no, mark no and click here to skip to the next section [skips to the next page]
50. Who can view your full profile? (everyone at your school, friends of friends, only friends, not sure)
51. Which types of people can see your profile? (undergraduates, graduates, alumni, faculty, staff, not sure)
52. Do you adjust who can see your contact information? (yes, no)
53. Do you adjust what information the news feed can publish about you? (yes, no)
54. Do you adjust who can see your pictures? (yes, no)
55. Do you actively remove tags of yourself from pictures? (yes, no)
56. Do you display your relationship status on Facebook? (yes, no)
57. To whom would you publicly announce your relationship status outside of Facebook? (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
58. Do you display your political views on Facebook? (yes, no)
59. To whom would you publicly announce your political views outside of Facebook? (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
60. Do you display your religious views on Facebook? (yes, no)
61. To whom would you publicly announce your religious views outside of Facebook? (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
62. Do you display address or contact information? (yes, no)
63. To whom would you publicly announce your address or contact information outside of Facebook? (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
64. Do you display your concentration of study? (yes, no)
65. To whom would you publicly announce your concentration of study outside of Facebook? (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
66. Do you display the 'interested in' category on Facebook? If your answer is no, mark no and click here [skips to next page] (yes, no)
67. Do you display 'interested in' on Facebook to denote your sexuality? (yes, no)

- 68. To whom would you publicly announce your sexuality outside of Facebook?** (check all that apply) (family, close friends, friends, acquaintances, other students [who are not friends, family, or acquaintances], anyone)
- 69. Do you feel your Facebook picture is important?** (not very important, somewhat important, very important)
- 70. When selecting a profile picture to you pick a good picture of yourself?** (always, often, sometimes, rarely, never)
- 71. When browsing through profiles will you investigate profiles of people with attractive or interesting pictures?** (always, often, sometimes, rarely, never)
- 72. When looking at a person's profile how often do you view other pictures of that person (if available)?** (always, often, sometimes, rarely, never)
- 73. Academic Status** (freshman, sophomore, junior, senior, 5th year senior)
- 74. Do you belong to a non-academic (i.e. honors society) Fraternity or Sorority?** (yes, no)
- 75. Gender** (male, female, other)
- 76. Do you identify as:** (heterosexual, homosexual, bisexual, asexual, transgendered, other)
- 77. Race/ethnicity** (check all that apply) help [link to US census] (Hispanic or Latino, American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White, Other [please specify])

10.3 | PROPORTIONS FOR FACE-TO-FACE VS. FACEBOOK SHARING TENDENCIES

Comparison of Proportions, All Network

For reference, the scores for the comparison between proportion tests.

Comparison >1.28	Relationship	Political	Contact	Study
Family	2.07705554	2.65	2.50512	0
Friends	1.52096381	2.65	2.50512	0
Acquaintances	-0.30125766	-0.281	-1.9744	0
Anyone	-0.66330039	-0.5559	-4.1691	0

2007 Statistical Significance	Relationship	Political	Religious	Contact	Study	Sexuality
Family	0.76079728	1.62303	1.56248	1.73735	-0.5003	-0.4422
Close Friends	1.18455976	1.62303	1.83341	1.73735	-0.5003	-0.4422
Friends	0.76079728	0.65479	1.23274	0.21028	-0.5003	-0.4422
Acquaintances	-0.94676995	-0.2592	0.58393	-1.9464	-0.5003	-0.4422
Other Students	-1.26780037	-0.2592	0.58393	-3.5649	-0.5003	-0.4422
Anyone	-1.26780037	-0.2592	0.58393	-3.5649	-0.5003	-0.4422

Comparison of Proportions, Just Friends

For reference, the scores for the comparison between proportion tests.

2006 Statistical Significance	Relationship	Political	Contact	Study
Family	0.75950861	0.75951	1.52554	0
Friends	2.01307417	1.7086	2.48215	0.41051
Acquaintances	-1.02022835	0.75951	0	-0.3775
Anyone	-1.02022835	0.75951	-3.5229	-0.3775

Comparison (42) >1.28	Relationship	Political	Religious	Contact	Study	Sexuality
Family	-1.31442769	1.92961	2.01691	3.60824	-0.7117	0.4668
Close Friends	-0.79840843	2.40001	2.66091	4.21351	-0.7117	0.4668
Friends	-1.00513228	1.55852	1.74336	2.81912	-0.7117	0.4668
Acquaintances	-3.79865755	-0.1859	1.28898	-1.4769	-0.7117	0.4668
Other Students	-3.79865755	-0.1859	1.28898	-3.9249	-0.7117	0.4668
Anyone	-3.79865755	-0.1859	1.28898	-4.5103	-0.7117	0.4668

Averages of Profile Aspect Sharing Differences (percent)

The averages, for relative comparison purposes only. As discussed earlier, the Facebook category can't be accurately compared in this fashion. You can, however, see some of the same trends identified in the specific break-downs.

2006 Average (40)	Relationship	Political	Contact	Study
Family	84	83	90	90
Friends	88	88	95	90
Acquaintances	60	68	53	90
Anyone	60	68	11	90
Facebook	75	67	89	90

2007 Average (63)	Relationship	Political	Religious	Contact	Study	Sexuality
Family	77	71	65	92	89	66
Close Friends	82	74	71	95	89	66
Friends	78	62	55	82	89	66
Acquaintances	46	47	52	38	89	66
Other Students	46	47	52	9	89	66
Anyone	46	47	52	9	89	66
Facebook	81	48	42	61	94	60

10.4 | COMPLETE FINDINGS

Available online at <http://thefacebookproject.com/resource/datasets.html>

10.5 | SCREENSHOTS OF FACEBOOK

Taken from the author's account, these cannot be publicly published online.