

Independent Senior Project
SCS4950
Kyle Curlew
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Drawn to the Assemblage: Actor-Network Theory, Facebook and Consent

Abstract

In this paper I explore how the Facebook actor-network enlists the participation and consent of human actors through an alliance of humans and nonhumans. The theoretical framework that informed my fieldwork and analysis of data was Actor-Network Theory (ANT) and the work of Bruno Latour. Using the extended-case method, I took a qualitative approach to explore how users experienced the Facebook actor-network and developed a case study that could then be used to extend and further develop ANT. I used a purposive sampling method to recruit three users and three non-users of Facebook; I then used an open-ended interview guide to explore various topics and themes (e.g. general social network site usage, experiences with Facebook and perceptions of surveillance). The outcome of the research suggested that there are a variety of symmetrical enlistment strategies that the Facebook actor-network utilizes to enlist, proliferate and maintain the integrity of the overall network (e.g. notifications on mobile devices). The complexity and exploitative capacity of the Facebook actor-network is blackboxed and punctuated at the users computer monitor and mobile devices obscuring its more nefarious consequences. Even with this obscurity, the research participants demonstrated instances of resistance through metaphors of addiction and corruption and a valorization of those who left Facebook.

Some **keywords** that characterize this research include: actor-network theory (ANT), social network sites (SNS), surveillance and governmentality.

"Everyone is on Facebook. And everything. Every organization, like I don't know how to explain it. But its like the world revolves around Facebook."

Fern interview

Introduction

There is a gravitational pull that draws human actors to log into their Facebook accounts, via their computer or their many mobile devices, and engage in vast networks of friends, strangers and coded programs and subprograms. Social network sites (SNS) have become a fundamental form of communication in the Western World. Users of SNS, in particular, users of Facebook, post and give access

to an unprecedented amount of personal information. It is the intentions of this project to analyze and understand potential reasons for users' consent to subject themselves to accompanying surveillance practices that underscore the entire existence of such platforms. Through the lens of Actor-Network Theory (ANT), this research seeks to understand the associations between human and nonhuman actants in the Facebook actor-network, to understand how surveillance is wrapped into actor-network associations, and to study how human and nonhuman actors enlist and reenlist the consent of users in a dynamic and constant process.

When a user engages with any Facebook tools or functions they are considered to be consenting to the *Terms of Use*. These *Terms of Use* reveal the capitalistic intentions of Facebook that hide in plain sight as few people take the time to read the document. Facebook is an advertising tool that monetizes user data by either selling it or organizing it to offer precision advertisement to Facebook users. It surveils, sorts and shapes user interaction to maximize these capitalistic goals, while claiming ownership of any information posted to the platform (Norgrove & Bean 4). Consent, in this context, is embodied in a human actor's engagement with Facebook. It is also important to note that this consent is an active process in the sense that consenting to Facebook's user policies is premised on use.

This question of consent is important because of the gratuitous potential for exploitation. As Djick (2012) asserts, "connectivity is premised on a double logic of empowerment *and* exploitation" (144). Some theorists, such as Albrechtslund (2008) discuss how SNS create the potential of empowerment through participant surveillance. Others, such as Christensen (2011) speak of the liberation discourse of

new media that gives activists powerful tools to work towards emancipatory principles. However, this double logic reinforces that the Internet is not a neutral place—it is a place that is literally carved up by state and corporate actors seeking governance and profit. Kramer et al. (2013) published evidence of emotional contagion on social network sites. In a notorious research experiment using 689,003 random participants, psychologists were able to influence emotions on mass by manipulating people's newsfeeds to display either positive or negative emotions, to which people would begin to post positive or negative responses. (Kramer et al.). This research was done without any ethical consideration for the very real people influenced by the experiment and without any accountability. Research into how Facebook can enlist so many users that can subsequently be influenced towards capital gain is crucial for understanding the extent of potential exploitation. Therefore it is important for this project to examine the exploitative capacity of Facebook, while remaining mindful of its incredibly empowering nature.

I begin this paper with an overview of Actor-Network Theory, the theory that frames my research and analysis, as well as an overview of the literature on ANT, Facebook and surveillance studies. I then provide an illustration of my research methodology, research design, and the ethical framework that has guided me through the various overlapping steps of conducting this project. Finally I provide samples of my thematically coded results, framing my participants and their positions in the Facebook actor-network. I conclude with a discussion of these results in relation to an extension and augmentation of my original theoretical framework to account for results that exceeded my expectations.

Theoretical Framework

I use Actor-network Theory to frame my approach to research, data collection, and my subsequent analysis of qualitative data. ANT provides an apt and exploratory theoretical framework for analyzing the interactions between the complex human (user) and non-human (Facebook interface, algorithms and protocols) actor-networks that Facebook is comprised of. In its genesis, ANT was originally conceived to study technoscience and human interaction (Sismondo 81). Sergio Sismondo (2009) explains, “ANT represents technoscience as the creation of larger and stronger networks” (81). After becoming popular, this theory began to be applied to study other phenomena in the relationships between humans and technology. The collaboration of Bruno Latour, Michel Callon and John Law originally led to the development of this theory—however, this paper will be utilizing this theory specifically through Latour’s perspective.

ANT is concerned fundamentally with actors and networks—however, in theory, it sees no distinction between human and nonhuman actors (Sismondo 82). Sismondo observes, “Electrons, elections, and everything in between contribute to the building of networks” (81). These networks between humans and nonhumans are incredibly complicated and always in action. Latour (1999) uses the daedalion as an operational metaphor to describe these sociotechnical networks. He writes, “a daedalion, the word in Greek that has been used to describe the labyrinth, is something curved, veering from the straight line, artful but fake, beautiful but contrived” (175).

Jose van Dijck (2012) refers to networks “as performative infrastructures and actors—both human and nonhuman—are thus inextricably intertwined in the shaping of interactive processes” (151). This is what Latour refers to as the “folding of humans and nonhumans into each other” (176). In this way ANT does not privilege humans or nonhumans as dominant in the exchanges that construct networks and shape our desires and intentions.

Latour asserts, “we live in collectives, not in societies” (193). He further asserts, “we have substituted the notion of collective—defined as an exchange of human and nonhuman properties inside a corporate body—for the tainted word ‘society’” (193). He makes this distinction to distance his work from any sort of subject-object dichotomy (194). Latour (2005) criticizes the ‘social explanation’ for interrupting and disassembling the flow of associations within collectives (8). He views classical sociology as limiting itself to a particular homogenous and anthropocentric set of associations (ibid 8). He offers a new way of understanding these associations through actor-networks or collectives. Viewing our interactions with the digital “cyberworld” as actor-networks also constructs a distinction from the traditional usage of the word society. As we will explore, interactions in online actor-networks are quite different to those in the actual, physical world.

As much as possible, I will refer to both humans and nonhumans as actants, as opposed to actors. Latour explains, “since the word ‘agent’ (or ‘actor’) in the case of nonhumans is uncommon” (180). Sismondo writes, “actors are made to act; as originally defined, the actors of ANT are actants, things made to act” (82). I would like to note that the importance of nonhumans in these networks is their role in

reconfiguring human agency through coded algorithms and protocols (85). Because of this nonhuman power, ANT considers them to have agency separate from humans (85).

Human agency is shaped by nonhumans through a process of *technical mediation*—which Latour breaks into four parts: interference, composition, folding of time and space and delegation. In order to understand *interference*—we must first understand the concepts *program of action* and *translation*. Latour defines *program of action* as “The series of goals and steps and intentions that an agent can describe in a story...” (178). Concerning *translation*, Latour writes, “I used translation to mean displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree modifies the original two” (179). *Interference* then, is when the path of an actant is interrupted by the path of another actant—the meaning between both actants are fused or translated thus changing the *program of action* and creating a new third actant. It is important to be mindful that these actants can be both human and/or nonhuman and are a part of a larger actor-network.

The second part of the process of *technical mediation* is composition. Every action that occurs in the network of actants is composed of many more subprograms (Latour 181). Furthermore, the weight of responsibility for all these actions is distributed equally through out the collective of actants (Latour 180). Latour elaborates, “Action is simply not a property of humans but an association of actants, and this is the second meaning of technical mediation” (182). In other

words, collectives or actor-networks are composed of a *program of action* and many subprograms; all of these are important to the whole.

The third part of the process of *technical mediation* is the folding of time and space. The folding of time and space is summed up in the concepts of *blackboxing* and *punctuation*. Actions in networks are subject to blackboxing, “a process that makes the joint production of actors and artifacts entirely opaque” (Latour 183). A blackbox includes all of the intentions of a network that reach over space and time—including the intentions of mechanics, politicians and advertisers that were connected to creating the systems of organization that brought an actant into existence. Many of these intentions, and the complexities of relations between actants, are punctuated at one single point in time and space (Latour 185). An example of this, which will be elaborated on later, is the way your mobile device interface hides all of the computer components, codes and algorithms, servers, engineers and computer scientists that are all a part of the actor-network that allows you to use the mobile device in the first place (Dicjk 144).

The forth and final process of *technical mediation* is *delegation* or “the crossing boundary between signs and things” (Latour 185). Delegation essentially means that the collective of actants, however simple, complicated or blackboxed, delegates or displaces intentions (Latour 186). In other words, an actant or collective of actants can relationally shape the intentions and goals of humans. In this paper, I use Latour’s theories to unpack the blackbox of the Facebook actor-network and its many assemblages in order to glimpse at the role Facebook plays in symmetrically enlisting the active consent of human actants—despite surveillance

practices and capitalist profiteering. Dijck elaborates, “a technology never simply *is*, but is part of a larger evolving scheme of invention, development, acceptance, implementation, resistance and rejection—in short, a process of constant reconfiguration” (151). It is important to understand how Facebook engages in a process of reconfiguration of the intentions of human actants—and the political repercussions that may subsequently arise.

According to Sismondo there are some disadvantages to using ANT in a sociological exploration—notably, ANT appears to ignore cultural influence on the associations within an actor-network and, in some instances, affords too much agency to nonhuman actants (87). Sismondo explains, “because ANT treats humans and nonhumans on the same footing, and because it adopts an externalized view of actors, it does not pay attention to such distinctively human and apparently subjective factors as culture and practices” (89). As we are looking at the macro scale assemblages of humans and nonhumans—I will be still engage with this externalized perspective of associations as to maintain theoretical symmetry between subject and object. I would like to note, however, that the cultural practices of human actants are incredibly important in these actor-network exchanges—however, such elaboration falls out of the scope of this research.

The other criticism that has been utilized towards ANT is how such theorists distribute agency—perhaps affording too much agency to nonhuman actants (Sismondo 89). Critics have largely criticized that “non-humans can appear to act in exactly the same way as do humans—they can have interests, they can enroll others” (90). They have accused ANT of not paying any heed to the importance of

some factors that position humans as inherently different from nonhumans—such as intentionality (90). It must be noted however, that the properties of nonhumans when considering web 2.0 platforms, such as Facebook, are becoming much more automatic—to the point of rewriting their own algorithms to react to human interaction (van Dijck 145). ANT may not be appropriate for all socio-cultural contexts—but in analyzing the associations that folds humans and nonhumans so deeply together, it is an apt entry point to understanding these interactions.

Literature Review

Facebook

Facebook is the object of much research and debate at the moment—much of it revolves around its accumulation of personal data and its reach in accessing and utilizing user information. Facebook is a part of a larger category of technology called Social Network Sites (SNS), defined by Boyd and Ellison (2008),

as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (211).

Boyd (2007) sums up this definition in three predominant features of SNS: profiles, friends lists and comments (2). There are usually many additional features, such as Facebook's function that allows independent applications to function on their SNS—but the former three build the foundation of SNS social architecture (2).

Furthermore, Danah Boyd (2007) asserts that SNS constitute as a form of *mediated public* or “environments where people can gather publicly through mediating technology” (2). While carrying some of the features of public spaces, the

ability for people, through the reactions of others, to make sense of social norms that shape their identity, mediated publics are further defined by features shaped by technology's mediation (ibid 2). These are persistence, searchability, replicability and the invisible audience (ibid 2-3). In other words—interactions in a mediated public endure temporally, are easily searchable, can be copied outside of its original context and are seen by an unknowable amount of people (ibid 2-3). Albrechtslund (2008) observes, “Together, these four properties make friendships ‘eternal’—or at least existing beyond the control of the involved persons” (3).

It is because of the vast amount of users that Facebook boasts that I will be using it as the focal point of my research into SNS, consent and surveillance. Facebook began in 2004 as a student led Harvard SNS—which eventually hit the mainstream and became the largest SNS in the world, effectively taking over from the then dominant Myspace (Boyd and Ellison 218). Facebook now boasts over one and a half billion members globally. For those interested in the social sciences, this certainly raises an eyebrow.

John Armitage (2013) brings attention to a concept called the *doctrine of compulsory appearance* that offers an explanation for why so many people feel social pressure to create and upkeep an online identity. This doctrine is enforced informally through the sheer number of users participating in SNS technology—when someone tries to “disappear” they are drawn back through social coercion and pressure (Armitage). Armitage observes, “because it (Facebook) does not know or understand the reasoning of such people, they come into view only as people who are ‘missing out’ on ‘big consumer savings’ set up for somebody else’s profits in the

attention economy” (Armitage). There is no doubt that there is some kind of social pull that draws people into using Facebook, and furthermore, keeps people from leaving for long.

Norgrove and Bean (2011) equate this social pull with Raymond Williams’ interpretation of hegemony—as a process that expresses itself through the lived experience of actors (5). Norgrove and Bean assert that if the relationship between Facebook and users involve a degree of consent and coercion than it is “Indicative of a hegemonic relationship between users of such sites, and a wider social domain where the individual and the marketplace reign supreme in the political consciousness” (5). However, as will be explored later, the use of these concepts is rather anthropocentric and asymmetrical—these concepts ignore the role Facebook itself plays as an actant in shaping and augmenting associations.

When developed and released, web 2.0 provided the capacity for users, particularly those who did not have a computer science background, to participate and collaborate in countless productive ways (Berg 1). This software platform provided the digital architecture that allowed for social network sites to operate (ibid 1). One of the essential dynamics that has come under recent scrutiny is the role of algorithms in shaping human interaction on Facebook. Berg (2014) asserts that the facilitation and maintenance of user interaction “is achieved by means of complex algorithmic calculations through which the exponential growth of users’ personal networks is supported” (2). Algorithms become an important dimension in the shaping of intentions. Berg describes how these algorithmic codes operate on Facebook,

Facebook's database architecture makes it possible to capture arbitrary actions and relationships between users and objects thus laying the foundation for a highly complex informational infrastructure that fuels the Facebook experience for users and their friends. The personal and interactional data that is generated through Facebook user activity becomes part of the social graph (a term commonly used by Facebook to describe the system's architecture) and is visualized through the Timeline and automatically distributed to other users through the News Feed... Facebook is thus not simply mapping relationships to certain objects, but rather establishes an understanding of rich connections between a larger number of actions and objects and that in turn determines how information is shown to users (2).

Through the algorithmic structure of Facebook, the software determines which data is most important to human actants and displays a larger quantity of that data on that actant's newsfeed (ibid 2). It is for this reason that I have chosen to use ANT to conduct my analysis, as the algorithmic structure of Facebook plays a crucial role in shaping the intentionality of human actants.

Actor-Network Theory and the Facebook Assemblage

Technology, in this case, the web 2.0 platform Facebook, is an active mediator, or actant, in the associations of humans (Dijck 142). This mediating role is an important dimension of Facebook network creation and maintenance that is often underplayed in SNS literature. Many researchers have ascribed agency to only human actants—rendering their explorations of the topic single sighted, homogenous and limited. This is an especially important criticism considering the complexity of algorithms that orchestrate the internal architecture of Facebook (Dijck 144). Dijck (2012) elaborates, “Any platform's connective structure is mediated by protocols: formal descriptions of digital message formats complemented by rules for regulating those messages in or between computing

systems” (144). He continues to explain that it is the Facebook Corporation, along with state laws and regulations, which determine the internal logics behind these protocols (ibid 144). Many of these protocols are hidden behind a visual interface, influencing and contributing to the shape of human interaction—often without us realizing it (ibid 144). This complex of protocols and algorithms that play an active role in shaping human interaction is blackboxed and punctuated at the visual interface of a user’s screen (ibid 144). This is an incredibly important insight into Facebook’s active place in shaping and mediating social relations and it has interesting implications when applied to Latour’s framework of technical mediation. Facebook, as punctuated at the visual interface, becomes a single actant, as opposed to a seemingly infinite plethora of heterogeneous sub processes building a globalized actor-network.

As mentioned above, actants and actor-networks are characterized by action. Tania Bucher (2012) refers to Facebook as a collection of *assemblages* or “a formation and process of assembling rather than a static arrangement” (481). This assemblage includes humans, nonhumans, algorithms, social practices and cultural values (481). The Facebook assemblage is constantly being shaped, Djick asserts, “technology shapes sociality as much as sociality shapes technology—a process in which humans and machines have their own distinctive but mutually shaping roles” (146). One way to picture an assemblage is the group of symmetrical relations at Grenfell Campus, Memorial University as a standalone (though interconnected) group of associated actants in the Facebook actor-network.

Actor-Network Theory seeks to understand how actor-networks are produced and stabilized and reproduced (Bucher 481). Bucher writes, “by organizing heterogeneous relations in a specific way, constitutes a productive force: it makes new relations possible” (481). Narrowing in on the Facebook assemblages Bucher demonstrates how the very software of Facebook shapes how sociality is conducted (ibid 482). Facebook provides functions for users to create a profile that allow them to describe their demographic and identifying features—however, all of the information input must conform to the shape and contours of the coding algorithms (ibid 482). Bucher points out, “Finding friends and forging connections is made easier with the help of algorithms” (ibid 484). Berg illustrates, “Assuming the function of a social intermediary, Facebook uses algorithms to structure the deliverance of social and symbolic content between users and thus provides users with more than an instrument facilitating social interaction” (5). The software itself becomes an actant in the complex assemblage of associations in the Facebook actor-network.

The ways in which the Facebook platform’s architecture is constructed by computer scientists literally translates the intentions of Facebook, its program of action, into the ways in which human users are relationally shaped: surveillance, capital and the proliferation of users. Djick observes, “A platform’s architecture—its interface design, code, algorithms—is always the temporary outcome of its owners attempt to steer users’ activities in a certain direction” (144). Djick continues to theorize that the interface, profile adjustments and changes that have occurred over the years are an attempt by Facebook to translate its program of action more

accurately into Facebook actor-network (ibid 145). This further precision of translation effects the intentions of all the actants associated in the plethora of global assemblages.

However, people are not passive receivers of translated programs of action in a top/down model. Human and nonhuman actants, once roles are delegated, become entirely new actants with unpredictable intentions. This not only allows users to interpret or use a feature in ways not productive to its original intention (Djick 146), but it allows for resistance against Facebook's more nefarious intentions. The relationship between human and nonhuman actants is incredibly complex—with human actants interacting with each other through a mediated platform and the algorithms responding and changing to the human interactions (ibid 147). Djick writes, "human and technical agents, rather than being hierarchically ordered entities, are mutually, entwined in determining a platform's usage" (147). The implications of this are that SNS introduce a new type of agency. Djick continues, "People have agency, but objects have agency too: nonhuman elements, like algorithms, affect how people act and how they are controlled" (151). This must be understood if we are to fully grasp the depth and durability of the actor-networks that are fundamentally designed to exploit and proliferate users.

The Panoptic Actor-Network?

Surveillance, according to David Lyons (2009) is defined as to "watch over"; he uses this incredibly broad definition to understand the surveillance of everyday life (2). He further asserts that the role of communication technology (in this case, SNS) is to enhance the capacity and efficiency to which we surveil (2). Not only has

our capacity to surveil increased in the everyday context, but it has also become pervasive. Lyons observes, “Today, however, this process is vastly magnified, such that all manner of everyday activities are recorded, checked, traced and monitored for a variety of purposes” (7).

When we think theoretically of surveillance, most of us will probably find ourselves maneuvering through Bentham’s nightmarish panopticon. Foucault (1977) famously used the panopticon as an overarching metaphor to elaborate his theories of surveillance and disciplinary society. He writes,

In this central tower, the director may spy on all the employees that he has under his orders... he will be able to judge them continuously, alter their behavior, impose upon them the methods he thinks best; and it will even be possible to observe the director himself (204).

However, the panopticon has become an outdated, but still incredibly important, concept when studying theories of surveillance and SNS. Consider how the director in Foucault’s example might be replaced by the series of digital algorithms and how that might resemble an entire web of surveillance processes as opposed to a central and static tower. Much of the surveillance that occurs for governance and profit has become automated (Lyons 12).

David Murakami Wood (2007) points out, “The one seemingly universally accepted ‘fact’ about Foucault within surveillance studies is that he did not deal with the impact of contemporary, and in particular, digital, technologies.” (251). Wood calls for a moving beyond Foucault, giving him credit, however asserting, “The Panopticon remains a useful figure, however every new technology is not the Panopticon recreated, nor does panoticism describe every situation” (257). He instead points to ANT as a fruitful theoretical and methodological frame for

understanding the complexities of surveillance in a digitally mediated context (258).

Haggerty (2006) argues that though Foucault's usage of the panopticon to characterize surveillance has become outdated and cliché, his larger project of understanding governmentality is still incredibly useful (39). Haggerty defines governmentality as "characteristic efforts to pattern the behavior of people in prescribed directions" (40). Facebook can thus be categorized as a governmental technology used in the overall architecture of social control. However, "the emphasis on subjects as active agents suggests that all governmental projects entail opportunities for resistance, avoidance or subversion" (ibid 40). This resistance makes the process of social control through the Facebook actor-network a negotiation of intentions that are translated into the codes and through the various associations of humans and non-humans.

As surveillance is not the primary focus of this research, I will not elaborate much further into how surveillance can be understood through ANT. However, it is important to bear in mind that the surveillance occurs relationally between associations of human and nonhuman actants in larger actor-networks. It is also important to note that the study of surveillance is inseparable from any form of exploration of Facebook. An important note that Wood and Graham (2006) make is that "through the use of automated systems of surveillance and control, the worldviews and ordering processes... can be hidden... blackboxed and punctualised such that the collective itself becomes a seemingly individual component of a broader network" (8).

These systems of surveillance and social sorting are viewed as automated and thus unbiased, however, the prejudices and intentions of the code architects can be encoded into the very fabrics of the technologies they design (Wood and Graham 8). Berg illustrates, “The algorithms that Facebook uses seemingly create a social context that resembles the ordinary, the safe and the common” (6). This takes on an incredibly malicious form in the Facebook actor-network, not only disguising the existence of elaborate surveillance for capital gain and governance, but also normalizing its existence. ANT provides an incredibly interesting rubric for understanding how Facebook encodes and translates its programs of action through the actor-network and how it punctuates this entire actor-network into a newsfeed at a human actant’s computer monitor.

Research Questions

My goal in this research is to explore why people feel compelled to use Facebook despite the surveillance practices, commodification and monetization of user data that occur in the process of their participation. As explored in the literature review, there are gaps in research concerning how ANT fits into the rubric of consent and participation. Other researchers explore these issues, however, they privilege the human participants and give very little attention to nonhuman participants (such as the research of Armitage, Norgrove and Bean). Throughout this research, I explore the following questions:

1. Using Actor-network Theory, I explore how Facebook as a nonhuman actant symmetrically enlists human actants (e.g. what compels them to use

Facebook in their everyday life? What roll do nonhuman actants play in enlisting human consent? How do humans and nonhumans interact in the Facebook collective? Do human actants consider surveillance as a negatively associated risk to using Facebook?).

2. Through Latour's framework of technical mediation I explore how nonhuman actants change the intentions of human actants in meaningful ways (e.g. how are human actant intentions influenced in knowable and unknowable ways?)

3. What are the social and cultural consequences of participation in Facebook collectives (e.g. how are human actants commodified into monetized data? Are there perceived risks to participatory surveillance?)

Methodological Framework

I remain inspired and informed by Michael Burawoy's (1998) methodological framework for the reflexive science and extended case method. Burawoy separates the field of scientific inquiry into two overarching ontological/epistemological assumptions: Positive science and reflexive science (Burawoy 6). The prior assumes an external world separate from the researcher studying it—which is very useful for studying the physical qualities of the natural world (6). The latter becomes very useful for studying the social, cultural and psychological. Burawoy writes, “where positive science proposes to insulate subject from object, reflexive sciences elevates *dialogue* as it's defining principle and *intersubjectivity* between participant and observer as its premise” (14). The reflexive scientist embraces context and reflexive interaction between the participant and the observer.

The extended case method is the foundational and primary tool for the reflexive scientist. It maintains some general methodological assumptions for researching social and cultural phenomenon that will be useful in my research. First, “extending the observer to the participant” (Burawoy 16), or in other words, the observer is a part of the world they are observing (17). Second, “extending observations over space and time”, implying that situational knowledge produced through qualitative research must be translated into social process that display power dynamics (18). Third, “extending out from process to force”, that connects social process to external forces—essentially connecting the micro interactions to the macro structures (19). Forth and finally, “extending theory”, arguably the most important dimension of the extended case method, the researcher begins with theory, and through fieldwork, refutes and builds on those theories (20). In asserting the importance of theory, Burawoy writes, “It guides interventions, it constitutes situated knowledges into social processes, and it locates those social processes in their wider context of determination” (21). Theory is essential to understanding the case, but the case extends theory further by refuting the previous assumptions it held.

I would like to note that I have augmented the extended case method with methodologies employed in ANT. Most notably, as mentioned in my theoretical framework, Latour leaves behind society and the social for the collective in order to avoid subject/object dichotomies. So instead of translating my qualitative data into social processes—I will be exploring how that data can be translated into positions in the collective.

Methods

Participants

The six participants in this research were students of Grenfell, roughly in their twenties. All of the participants have used Facebook and are familiar with Facebook to some capacity. Only one participant, Stephanie, used it solely for a job and then left Facebook when she left the job. Other than Stephanie, all participants used Facebook for a great deal of its existence. Most of them were enlisted to the Facebook actor-network between 2005 and 2007. Two of the participants, Ryan and Mathew, both quit relatively recently—just after the New Year. Other than Stephanie, all participants are or were avid users of social media, who would participate in discussions, consistently add user content and surveil the user content of their ‘friends’.

Measurement

I have utilized an open-ended interview guide to conduct interviews and develop a qualitative case of narratives. The interview was estimated to be a half hour to an hour in length. The structure of the interview was organized thematically. The questions were all open ended with a stated goal of seeking narratives of Facebook experiences from which to base an analysis. The topics I have explored through these interviews were: Social Network Site Usage (e.g. Have you ever used any social network sites other than Facebook?), Experiences with Use of Facebook (e.g. Do you have any particular reasons why you use Facebook?), Experiences with Not Using Facebook (e.g. Can you explain why you do not use Facebook?), and Perceptions of Surveillance and Capitalism (e.g. Do you consider

Facebook's use of your information an invasion of your privacy?). As I engaged in interviews with my participants and transcribed the interviews new themes emerged. They now include: Symmetrical Enlistment for Facebook Users, Symmetrical Enlistment For the Disappeared, Blackboxing the Assemblage, Metaphors of Addiction and Corruption and the Valorization of the Disappeared.

Research Design and Ethics

The design of my research followed the extended case method as laid out in my methodological framework. I began with Actor-network theory and a deep review of the literature surrounding ANT and Facebook, and then moved to conduct theoretically informed open-ended interviews with the intention of extending ANT theory. Thus, ANT had directed my interview topics and themes, which were extended and reframed throughout the research process to account for findings. After thematic coding and the construction of a case study, I then used that case to further develop the ANT scholarship on Facebook, surveillance and consent.

To enlist participants for research I used purposive sampling via an advertisement on Facebook. In order to conduct a comparative analysis to understand the social pressures that bring Facebook users to consent to the *Terms of Use* and participate in the Facebook collective, I have interviewed three participants who are current participants in Facebook and three participants who have never used Facebook or have recently shut down their account. In order to solicit participants who were of a similar generation—I chose to target only students of Grenfell Campus, Memorial University. Other demographic details carry

little to no importance to this project—because of time constraints and resources; I will not be delving into these details.

This research posed minimum risk to the participants, however I still maintained some precautions. It is also important to note that this research did not target a vulnerable population. The topic I explored was not a sensitive or precarious issue. And the research framework was not founded on any sort of deceit. With this in mind, this research utilized pseudonyms for participants. It was explicitly stated that participation in this research is voluntary, that they will retain ownership of all data collected and they have the right to withdraw from the research at any time without consequence. I approached this project with a mind towards transparency—by this I mean, no information pertaining to my research or intentions will be hidden from the participant. The only exception is that all interviews and transcriptions will remain confidential. All participants signed a consent form and had the opportunity to give their active consent. All participants will be given a chance to review the final draft to be sure they are not being misrepresented and have a role in the editing process.

Results

Symmetrical Enlistment for Facebook Users

Human actants are enlisted and maintained by the Facebook assemblage—in other words, an alliance between human and non-human actants through symmetrical enlistment strategies keep human actants associated in association with the assemblage. Informants described several factors that could be interpreted as symmetrical enlistment.

Informants expressed that they would feel drawn into the Facebook assemblage through human and nonhuman pressure. When asked if other human actants pressured him into using Facebook, Anthony replied,

I feel like they were definitely like 'check it out this is so cool,' 'check out my pictures,' you know? Or you know, 'such and such made this crazy status on Facebook and you should go check it out' (Anthony).

Fern replied to the same question,

They [friends] didn't really care too much, it was almost like I was just out of the loop and they wanted me to be in the loop. I mean, I felt pressure, just because they'd be talking about things that I didn't really know about or there would be pictures on me that I didn't even see (Fern).

Krystal also had a similar response,

Maybe not pressure but they were kinda like telling me stories like did you see this certain thing on Facebook, it's so cool. And I would be like no. And then it would make me want to go and see it (Krystal).

Facebook users, when not using Facebook, were drawn back into the Facebook assemblage through a symmetrical alliance between human and nonhuman actants. Other Facebook users would talk about events and social situations that could only be experienced through the Facebook Assemblage. The combination of human actants talking about non-human actants would create a pressure for my informants to reenter the assemblage.

The Facebook assemblage would maintain the enrollment of its users through a combination of human actants being shaped through nonhuman algorithmic computer software. The most visible of these maintenance strategies are the notifications that are typically sent to the human actant's mobile devices. Krystal described the experience of receiving notifications,

Oh I have notifications. So I immediately go to Facebook and than I immediately get like taken in by my Facebook newsfeed (Krystal).

She also added,

I feel like its just like constant like trying to notify you that you need to look at this because someone just did this and its like you need to be updated on what they're doing. And I feel like it's always constantly pulling you in (Krystal).

Fern responded,

I just want to read everything that they said. And I do care, and I will reply eventually but I just cannot reply right now but I need to see what they said immediately. Just out of pure curiosity (Fern).

Anthony similarly responded, "I will see a notification pop up. You gotta check it out sort of thing. Can't let those things accumulate too much" (Anthony).

It is apparent that human actants are drawn into Facebook via notifications that shape their immediate intentions. The notifications sometimes revolve around pictures and the maintenance of online identity. Anthony reported to a question about how many notifications he usually receives,

It depends on how many cool selfies I post in the end (laughter). Some days none, but if I post a pretty good picture than I will get you know, 40 or 50, it depends on how active Facebook is at that time (Anthony).

Krystal replied,

If it's like a picture of me that someone put up and tagged me in, than I got the notification, I would be like, 'oh my gosh I hope I don't look weird' ... (Krystal).

Human actants who interact directly with the Facebook assemblage are not the only people drawn into the associations of the Facebook actor-network—active non-users of Facebook are also drawn in.

Symmetrical Enlistment for the Disappeared

Active non-users of Facebook had a variety of reasons for not using Facebook—some were political and others were experiential. However, all non-user informants had used Facebook to some capacity in the past and subsequently quit. Mathew informed me,

I grew more and more uncomfortable with Facebook and using it with the knowledge that they invade privacy and use personal information for profit (Mathew).

Ryan described,

Just the fact that everything that people do they feel like they need to post it on social media for everyone else to see. Like pictures or statuses, everyone is trying to make themselves seem more happy than they actually are. And that really got to me. That's what made me realize that I just don't need Facebook in my life (Ryan)

Stephanie asserted,

I think it was because I went for long enough without having Facebook that I observed from the outside what Facebook did to a social structure without being integrated, I didn't like what I was seeing... (Stephanie).

Non-user human actants had very conscious reasons that reinforced their resistance to interacting directly with the Facebook assemblage.

However, it was demonstrated that even though these users had left the assemblage—they were still latently drawn into the actor-network through symmetrical enlistment strategies. Stephanie observed,

I would get [blank] to, if I need a ride to St. Johns, 'can you post to Facebook that I need a ride to St. Johns?' and by extension I am using Facebook, I'm using the social network, yeah. So really, I can't on any sort of grounds say I'm separated, or I can't be self-righteous about it. I mean I'm a part of it (Stephanie).

When asking Mathew how he found out about community events, he replied,

I have friends who have Facebook (laughter) (Mathew).

Ryan was drawn to the Facebook assemblage through learning about news or the local gossip from his friends,

If you had Facebook you would know. And [blank] would come in and say 'oh my god, there was a fire in Steventown! If you had Facebook you would know'" (Ryan).

It is apparent through the qualitative data that because all of the complexity of symmetrical enlistment is hidden behind the visual interface of Facebook—the users and nonusers are largely unaware of these potentially exploitative patterns.

Blackboxing the Facebook Assemblage

The complexities of the Facebook actor-network are often blackboxed or made to be opaque from both users and non-users of Facebook. Only one user had any awareness of the contents of this blackbox in terms of surveillance and the monetization of user data for profit. Mathew asserted,

When you use Facebook you choose to give them that information and they can basically do anything they want with it. Which is well fucked when it becomes so rich and they use the thing that you give them to get rich (Mathew).

All other informants were ignorant and/or apathetic of how Facebook exploited users for data and metadata to make a profit.

When asked whether they had any knowledge of the extent to which Facebook surveils and utilizes their data, both users and nonusers had a variety of responses. Stephanie responded,

No I don't. I know it's obviously for commercial interests, but I don't know to what extent it could be used for surveillance... I don't know outside of basic commercial interests and advertising and stuff like that (Stephanie).

Anthony replied,

I didn't consider it. That's the most insidious part, you don't know what they're doing and they don't tell you what they are doing. They should have a sparks notes or something for that (Anthony).

Some of the participants expressed apathetic responses to Facebook's surveillance and use of user data. Krystal responded,

I didn't really care (laughter)! I was just like, I'm going to talk to my friends and who's going to wanna know about my conversation about a cat to someone? (Krystal).

In response to whether he had read the *Terms of Use*, Anthony responded that he had not, he elaborated,

I don't know if it's because of the length or if it's because I don't think there is anything there that I would read that would stop me from proceeding (Anthony).

Fern responded to a question of why she continued to use Facebook despite potential invasion of privacy,

I don't really care, I mean I do to a certain extent, but I don't feel that there is anything that I really have to hide. I'm me and they can't do anything to change that. And if anyone wants to find out anything about me, well, I have nothing to hide (Fern).

In general, users and non-users were unaware of the extent to which the Facebook assemblage intruded into their lives or shaped their intentions and emotions. Even for Mathew, who became an active non-user of Facebook because of such reasons, was not aware to the full extent of the reach of the Facebook actor-network into the lives of human actants.

Metaphors of Addiction and Corruption

Despite the lack of knowledge of the contents of Facebook's blackbox—both users and non-users demonstrated a discourse of resistance. All users made reference to metaphors of addiction and corruption during the interviews. When asked if he would miss Facebook if he quit, Anthony responded,

I'd miss it, probably in the way I'd miss cigarettes. You know what I mean? I know it's bad for you but I really want one" (Anthony).

Fern asserted,

I like had withdrawals, it was like (laughter), withdrawals. That's a good way of putting it (Fern).

Informants who did not make reference to metaphors of addiction, made some reference to Facebook corrupting people or experiences. When referring to how taking pictures for Facebook effects an experience, Stephanie elaborated,

It's not actually an experience and so I just wanna use the word, like, adulteration, I don't know, it's a sort of tainting of the experience in a way (Stephanie).

Fern asserted,

It's like this thing that's corrupted our minds. I don't know, it's like they kind of figured out every little thing that's going to grasp us to this social media network and it's like genius really. It's weird like being aware of it, but it is. It's fucked (Fern).

Not only was Facebook described through metaphors of addiction and corruption, but also those who decided to quit were valorized.

Valorization of the Disappeared

Both user and non-user informants displayed valorization of the disappeared in various forms. Anthony elaborated on what he thought of those who did not use Facebook,

Yeah I'd say most people, to not use Facebook is the exception these days, and at least in my age bracket. The people that don't have it you know, you don't think any differently of them, you kinda admire them (Anthony).

Krystal thought there were advantages and disadvantages to not using Facebook, she responded,

I think it's good if it's for certain reasons, like I think that some people feel like people are too engaged in electronics... and I guess that's a positive aspect (Krystal).

However, she did add,

I think they could be more engaged with people if they did get into it. Because a lot of people are on Facebook (Krystal).

Some informants cited that Facebook could be an unproductive use of time—and those who don't use it experience particular advantages. Fern described,

it's advantages, I guess, in a way, could be that they don't get pulled into the jargon... a lot of the time I read a lot of nonsense. And they don't have to worry about that (Fern).

She continued,

And honestly I do think that that's more productive than Facebook because there are a lot of unproductive things that come on Facebook and you get pulled into it" (Fern).

Despite the Facebook assemblage and its exploitative capacity being blackboxed and hidden from both users and non-users—there are forms of resistance that stem from some awareness of Facebook's exploitative logic.

Discussion

Facebook is a constantly moving and shifting assemblage of human beings and machine, code architecture and forms of social organization—in this both humans and non-humans play a significant and symmetrical role in shaping

intentions and emotions. It is no secret that Facebook gathers information through a variety of surveillance strategies on its users to utilize for marketing and to swing a profit. Through the framework of ANT it becomes abundantly clear that Facebook translates these capitalistic programs of action into the Facebook actor-network. This affects the various assemblages of sociality in profound ways—the students of Grenfell Campus, Memorial University among them.

The Facebook actor-network accomplishes the tasks of proliferation and maintenance of users through the use of symmetrical enlistment strategies that vastly influence the intentions of human actants who can then be exploited for profit. To offer my own definition of symmetrical enlistment—it is the process of strategies that emerge from an actor-network through the alliance of humans and nonhumans to enlist new actants. Symmetrical enlistment, as shown by the above qualitative data, manifests itself as a feeling of being pulled or drawn into the Facebook assemblage. Human actants were originally drawn into Facebook through an alliance between Facebook user and the various features of the Facebook platform (statuses, tagging and photos). This is a form of technical mediation (Latour 178)—which interferes with human agency, folding it into the Facebook assemblage.

The human actant (agent 1) encounters another actant (agent 2) who is a part of a Facebook assemblage—this interrupts the intentionality of agent 1 and through the various stories told by agent 2 of “missing out” on the plethora of Facebook features that inevitably includes the vast majority of their peers and an array of nonhumans, agent 1 is drawn into the assemblage. This is a successful

manifestation of Facebook's need to proliferate its user base to expand its own marketability. However, as Bucher maintained, a Facebook assemblage is a process of producing and reproducing symmetrical relations of humans and nonhumans—not a static process (481). Therefore, it would suggest that human actants must be re-enlisted constantly in order to maintain the integrity of the assemblage.

Maintenance of the Facebook assemblage, according to the qualitative data, is negotiated through the notification system that is fed into a mobile device. The human actant (agent 1) receives a notification from their mobile device (agent 2). Agent 2 interrupts the program of action of agent 1 by way of a vibration or some sort of sound. Agent 1 then enters into an alliance with agent 2 and through the notification enters into association with the Facebook actor-network that is blackboxed and punctuated in agent 2. This happens several times a day, sometimes several times an hour—thus maintaining constant symmetrical enlistment and a constant reconfiguring of the assemblage.

Those who consider themselves active non-users of Facebook are still, sometimes unknowingly, drawn into association with the various assemblages of the actor-network. This would often be accomplished through teasing/hazing or event invitations from other human actants in association with the various humans and non-humans of the Facebook assemblage. Human actants would, through another human actant, ask them to use Facebook in their stead. To illustrate, a human actant (agent 1) would enter into association with the Facebook assemblage through symmetrical enlistment. They would carry a collection of programs of action and subprograms to another human actant (agent 2) who does not use

Facebook. The interaction between agent 1 and agent 2 would translate and delegate the program of action that originated in the architecture of the Facebook actor-network. In this way they are contributing and interacting with the Facebook actor-network. Unlike active users, active non-users are not consenting to this inclusion into the overall actor-network of Facebook. This brings up potential ethical concerns, as Facebook's still influencing and exploiting non-users for capital gain.

The exploitative potential of Facebook is translated through seemingly infinite associations of humans and non-humans. Cohen (2008) in the construction of a political economy of Facebook elaborates that this exploitation turns the consumer into a "prosumer" (7). He asserts, "it is important to acknowledge the ways in which Web 2.0 has altered the terrain of media business, notably by adjusting consumers roles in the production process" (7). By this he means that Facebook provides users with a platform to create and manipulate information by posting statuses, groups, pictures, videos and countless bytes of personal information that is then utilized by Facebook for profit. The human actant is not just consuming the services of the Facebook actor-network—but they are co-creators of the Facebook actor-network. This creative potential is given to Facebook for free, and sold by Facebook to make abundant capital gain. It is what Cohen dubs the commodification of collective knowledge (10). This collective knowledge is harnessed and made commodified by a saturation of surveillance—the sort I referred to above. All of this is made blackboxed and punctuated at a human actant's computer monitor or mobile device. Winokur (2003) asserts, "Its coercion

is cryptic and unconscious: as consumers of entertainment we are not usually aware of being under surveillance” (Winokur). Because of the obscurity of this blackbox—the human actant is rendered almost entirely unaware of the complexities and exploitative capacity of the Facebook actor-network that they willingly consent to.

As explored qualitatively above, informants have illustrated various discourses that hinted towards resistance strategies—despite being mostly unaware of the contents of the Facebook blackbox. These moments of resistance were expressed through metaphors of addiction and corruption and the valorization of the disappeared. In “Governmentality”, Foucault (1991) defines governing as, “the correct manner of managing individuals, goods and wealth...” (92). He continues to explain that governing occurs over “men (sic) in their relations” (93). Of course, in terms of ANT—these power relations are diffused over the associations of humans and non-humans. The nature of power on the Internet through a Foucaultian framework is asymmetrically diffused. Winokur describes, “Everyone has a little power, though power is shared unequally oppressively” (Winokur). The Internet, in this case Facebook, is comprised of a series of coded and hidden discourses meant to “define and categorize” (Winokur). As Haggerty explained—the production of subjects through discourse also entails moments of resistance (40). In this case, these metaphors of addiction and valorization of the disappeared appear as a counter-discourse to the pervasive and largely invisible penetrations into their lives.

As mentioned above, power is asymmetrically diffused across the entire Facebook actor-network—however, almost paradoxically, human and nonhuman

users play a role in symmetrically negotiating how Facebook is used and thus shaped. If this is the case, it is not surprising that Facebook has developed methods of accounting for and subsequently absorbing forms of resistance. Cohen points towards, “the powerful manner in which Facebook accommodates resistance within its very program, while at the same time maintaining control over determining outcomes” (12). Human users who resist aspects or functions of Facebook do so through Facebook groups, pages and statuses—thus allowing the Facebook actor-network to shape the outcomes (ibid 12). It transforms resistance into productivity that is then commodified and utilized towards capital (ibid 12). Facebook’s accommodation of dissent allows it to retain users and maintain the overall integrity of the actor-network.

The results of this research may seem to be overwhelmingly pessimistic in terms of the direction of new media technology and SNS, however, the appearance of discourses of resistance offer a path toward a more emancipatory creation of actor-networks. Benkler (2006) theorizes towards the emancipatory capacity of the Internet—particularly in the sense that people can create, with minimal resource costs, things that exist outside of the marketplace (4). There are many examples of this all over the Internet, in the case of Facebook; an example would be the use of ‘page’ functions to create classified sections (e.g. *Spotted at Grenfell*). Benkler hails the advent of a “networked information economy” and explains that the implications of this new economy may lead towards more anarchistic potentials (3). However, we must not forget that large portions of the Internet are coded and orchestrated by corporate and state actors—so we may have the capacity to create outside of the

marketplace but the architects of many of the Internet's platforms still retain the capacity to transform non-market creations into market commodity.

This research began with exploring why people consent to such outrageous invasions of privacy. It has now proliferated into a plethora of questions and future lines of inquiry. Further qualitative and quantitative research needs to be conducted into the creation and maintenance of the Facebook actor-network. It is important that this research into the exploitative capacity of SNS be augmented with its potential for empowerment. Among other important points of exploration is how users and non-users conceive of privacy—so we can further understand how users conceive SNS in terms of surveillance. It would also be of importance to ethnographically explore how users experience and perceive the exploitative push and pull of Facebook through a lens that is informed by theories of political economy. It is safe to say that there is still a lot of research to be done to study the full implications, for better or worse, of the “networked information economy” on the many associations of humans and nonhumans.

Conclusion

Facebook is a predominant feature of human and nonhuman association in the contemporary Western World that has a profound influence on Western culture and how people communicate. This research was inspired by the seemingly infinite complexity of Facebook as an actor-network and its influences on the lived experience of people. In this research I sought to understand how people were enlisted to use and consent to Facebook and its use of user data through ANT and a Latourian framework. As discussed above, consent in terms of Facebook is

acknowledged by interaction with the actor-network. Enlistment and maintenance of consent is achieved through the process of symmetrical enlistment through the alliance of human and nonhuman actants. Through this strategy, the Facebook actor-network is able to assert agency on a multitude of human and nonhuman actants in order to proliferate its user base and capital worth.

The Facebook program of action and the complexity and girth of its actor-network is blackboxed and punctuated at the visual interface of computer monitors and mobile devices. This essentially obscures Facebook's potential for invasive exploitation leaving users largely unaware of the commodification of their creative content. Furthermore, even with such a powerful blackbox, users exhibited a discourse of resistance to the overall actor-network and its symmetrical enlistment strategies. This resistance was demonstrated through metaphors of addiction and corruption and the valorization of the disappeared. The study of SNS is among the most important spheres of inquiry in the contemporary West—SNS such as Facebook, Instagram and Snapchat have become the primary platforms of communication that has allowed for both empowerment through the creation of user content and exploitation through the commodification of that content.

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