The Algorithmic Self:
Layered Accounts of Life and Identity in the 21st Century

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Abstract

This paper takes an actor network theory approach to explore some of the ways that algorithms co-construct identity and relational meaning in contemporary use of social media. Based on intensive interviews with participants as well as activity logging and data tracking, the author presents a richly layered set of accounts to help build our understanding of how individuals relate to their devices, search systems, and social network sites. This work extends critical analyses of the power of algorithms in implicating the social self by offering narrative accounts from multiple perspectives. It also contributes an innovative method for blending actor network theory with symbolic interaction to grapple with the complexity of everyday sensemaking practices within networked global information flows.

Keywords

Identity; actor network theory; algorithms; agency; critical; remix

Introduction

n identity (ĭ-dĕnɢtĭ-tē)

: The distinct personality of an individual regarded as a persisting entity; individuality.

: The quality or condition of being the same as something else.

v identify (ĭ-dĕnɢtə-fī')

: to conceive of as united or associated;

: to recognize or make a logical or causal connection

n identification (ĭ-dĕn'tə-fĭ-kā'shən)

: The attribution to yourself (consciously or unconsciously) of the characteristics of another person (or group of persons)

Computers, particularly those that seem to think on their own, have long fostered the perception that identity or selfhood is as much about information as it is about individual bodies. In the last decade of the 20th Century, this idea was explored through the concept of virtuality. In the first decade of the 21st Century, ubiquitous, mobile media interfaces replaced the computers that grounded our engagement in digital media. No longer sitting at desks in front of devices, connecting to the world through portals on our screens as virtual beings, we moved through complex networks of information flows, where media we produced, consumed, and shared converged across a global range of stages. Now, we witness a third shift, sponsored in many ways by the infrastructures and algorithms that

operate beneath the surface of interaction to co-construct self, identity, cultural categories, and meaning.

The relationship between technology and identity is not new, but adding the term "algorithmic" to these discussions shifts focus toward such questions as: How are our concepts of self-identity complicated by how we are identified by the systems we use? In what ways do our interactions with algorithms both identify us and foster certain ways of identifying with others? How do we frame our selves in relation to data we can't easily see or access because it these data are situated in algorithms, databases, DNA sequences, and so forth?

This article explores these questions by taking a particular and perhaps peculiar liberty with qualitative analysis to embody and give voice to code, software, devices, and other "non human" elements of the technologically-saturated situation. The theoretical premises for this analytical move emerge from actor network theory, rhetorical criticism, interpersonal relationship. Blending actor network theory, symbolic interactionism, and posthumanism ideas, I explore the interactions and relationships between us humans and our machines (writ broadly). This exercise is intetended to push forward Hayle's ideas about taking seriously that our technologies have impact—not in a simple technologically deterministic way, but in a way that tries to understand some of the mechanisms through which agency is developed and plays out in ways that have significant impact. In Hayles' most recent work, the impact is quite serious. She described last December at a talk in Umea

> *I know I shouldn't care that Facebook's timeline forces my personal history into a chronology of the jobs I've held. I know that in the scale of important things to worry about in the world, I shouldn't focus on the fact that my Facebook timeline encourages me to add materials to my timeline, until I've reached the category "born."*
>
> *As if my history started then.*
>
> *(research participant notes, 22 August 2012)*

Latour (2012) suggests that we are not just part of networks, but wholly defined by what can be found in databases. Senft (2012) refers to this as 'the grab,' an action of taking something we want, but also as a temporary fixing, as we might accomplish through a screengrab, or by making sense of something or someone very rapidly and then moving on. We might do this deliberately and consciously, or it might be a decision made through a complex and largely invisible interaction with the algorithms that mediate the interface.

> *A couple of years ago, I read an article that said we are being trapped by the technologies we're using now, and that while most of us believe we still have freedom of choice, this just isn't the case. He argued that our reliance on particular interfaces grows more powerful every time we upload another photo or document moments of our lives, because we're less and less likely to want to start all over again.*
>
> *So Facebook is based more on inertia. Even if we want to leave, we just don't.*
>
> *(research participant notes, 22 August 2012)*

A growing body of scholarship contributes to how we conceptualize our relationships with our platforms, devices, and technologies at the conceptual level. Deuze, Banks, & Spears (2012), for example, talk about the ways in which we're more than just surrounded by media, but experiencing life *in* media. This aligns with and in many ways pushes past previous scholars such as Gergen (1991) or Turkle (1995, 2011), who have long contended that the individual (and our understanding of identity) is impacted by ever-increasing connection with computers, technologies, and information. As Bolter (2012) notes, we interact not only with others but also "with the algorithm, the code that lies beneath the surface of the application" (p. 39). He continues, "Good digital design today encourages its users to proceduralize their behavior in order to enter into the interactions, and a large portion of those in developed countries have accepted this as the path to participation in digital media culture" (p. 45). These 'event loops' are designed to appear seamless, as an essential part of everyday sociality. As Gillespie (2012) notes, these algorithms provide a particular sort of "knowledge logic" that function

powerfully and invisibly. Hayles contends that we need to more directly address autonomous algorithms as agents, citing her recent study of the way rapid and automated market trading algorithms can cause mini-crashes in the stock market before a human literally has time to even notice anything has happened (2012).

This paper focuses on these issues at the level of everyday sensemaking. In what ways do we feel 'grabbed?' How do people talk about the meaning of their identity as bound up with everyday digital platforms for interaction? By exploring the way people move through these information spaces and flows, and talking with them about their everyday activities, we can add a rich voice to our conversations about meaning, identity, and algorithms.

> *I resent it because I feel trapped. Bad enough that we've become so accustomed to using facebook for personal communication among our networks of friends that we can't just turn it off. Now, I have to adjust to the parameters yet again, forcing my expression of identity into a still narrower box of options. This time, my timeline. My history.*
>
> *The sad, pathetic part of this story is that when I saw my profile in a timeline today, tears came, unbidden, rolling down my face. Silly to think I could continue to avoid timeline. Sillier still to realize how much it feels like a small violation of my independence. Ironic, when I know I participate willingly in Facebook and could shut down my account at any moment.*
>
> *It's just not that simple.*
>
> *(research participant notes, 22 August 2012)*

Methodology

This paper takes a symbolic interactionist approach to explore how people make sense of their relationships with their own information and the technologies that mediate their everyday activities. To get at this sort of information, I borrow Markham's (1998) techniques for participant observation and in-depth ethnographic interviewing; Latour's (2005) actor network theory concepts for following the data wherever it might go and for considering the agency of non-human agents; and Markham's lens of remix (2013) as a way to grapple with the complexity of data emerging from the interviews and observations.

In addition to intensive engagement with individuals who describe themselves as heavily saturated in social media, this project includes auto-phenomonological or -ethnographic data as a close read of multiple agencies at play in everyday interactions with and in digital media.

Discussion

> *As if my history could be so encapsulated by time, linear at that.*
>
> *I feel betrayed by the interface. Betrayed by an interface that appears to give so many choices on the surface, while limiting almost every bit of our creative endeavor to the pre-defined and pre-packaged boxes and categories within which we're supposed to find a place. It hurts us all, in different, small ways. Sure, I feel fine clicking the 'female' category, but I know at least two-dozen friends who wouldn't be able to choose a box. I'm supposed to declare a 'hometown' but I've not had one for more than 20 years, so that's not useful at all. I now have to mark places on a map, or accept the default map that appeared on my profile just this afternoon. I have to work to figure out how to shut down options. Modify the interface to make sure it's not doing something else invisible to me.*
>
> *The idea of being locked into a history that Facebook creates? What if I don't want to be defined by time or any other moment that Facebook has determined is "relevant" in my life?*

> *Why am I still crying?*
>
> *I mean, seriously, why does this affect me so much? Why would I care so much about Facebook?*

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(research participant notes, 22 August 2012)

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We live increasingly public lives. We spend a lot of time managing our identities in ways we never did before the internet made our every move potentially public. We also experience the world as it is mediated by algorithms functioning as "deep structures" (Deetz, 1992; Mumby, 1998). This study focuses on the everyday experience of people who would consider themselves to be a technologically "saturated self," in the sense that Gergen (1991) articulates. This particular paper will present a pastiche of narrative accounts that take a very close look at some of the ways people are making sense of their relationships with their platforms, technologies, and devices.

> *Truth be told, Google owns me much more than Facebook ever could. Google Plus uploaded all my photos from my computer and phone for sharing before I could figure out how to 'opt out.' At least I expect it from Facebook. But Google? It seemed so benign.*

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(research participant notes, 24 August 2012)

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