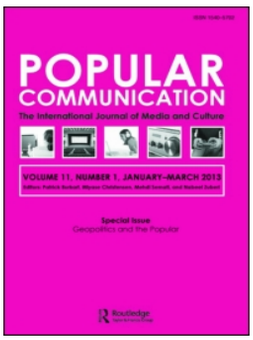

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# Verified: Self-presentation, identity management, and selfhood in the age of big data

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**ABSTRACT**

What new styles of selfhood and self-presentation, forms of social status, and arbiters of "authenticity" are being authorized and propagated in the wake of big data and affective capitalism? How are they functioning, for whom, and to what end? This article takes up these questions via an examination of a sought-after user identity badge, the Twitter verification checkmark, figuring it as both an affective lure that incentivizes specific styles of self-presentation and a disciplinary means through which capitalist logics work to condition and subsume the significance of the millions of forms of self-presentation generated daily. Beneath the promise of democratized access to social status and fame, the business practices of the social platforms in and through which we self-present draw us into privatized strategies of social sorting, identity management, and control. To conclude, the article will posit a new "ideal type" of selfhood for the big data age.

> Do not ask who I am and do not ask me to remain the same: leave it to our bureaucrats and our police to see that our papers are in order. (Michel Foucault, 1989, *The Archaeology of Knowledge*)

Over the past 200 years at least, in North America and Europe specifically, forms of selfhood and modes of self-presentation have become increasingly and complicatedly conditioned by the advances of capitalism and its ever-evolving search for new forms of value and profit. Capital is a social relation after all, and subjectivity is both imminent to and constitutive of its operations. And, as cultural historian Warren Sussman argues, "changes in culture do mean changes in modal types of character and … social structures do generate their own symbols" (Sussman, 1984, p. 285); our dominant concepts about who we are, how we present ourselves, what we value, and how we might relate to each other have always existed in tension with the economic, cultural, technological, and aesthetic forms and codes available to us.

How, then, might we understand contemporary forms of self-presentation and selfhood in the wake of society's recent "datalogical turn" (Clough, Gregory, Haber, & Scannell, 2015)? It is now axiomatic that we live in a world characterized by a capitalist mode of production predicated on the generation of vast amounts of random data via ubiquitous computing of all kinds, from which saleable units of meaning—or "capta"—are mined through forms of machine learning (Kitchin & Dodge, 2011). These developments, in turn, have produced new strategies for forecasting, targeting, and decision making in a

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growing range of economic, cultural, and political realms, effectively working to govern, predict, "and thereby modulate … emergent forms of sociality" (Clough et al., 2015, p. 153). This new digital "affective" capitalism purloins our desires, emotions, and forms of expressivity and turns them into commodities and assets. Affective capitalism is, quite literally, run on the fuel of individual feeling and self-expression taking place online; self-presentation is now a crucial part of the economic infrastructure (Andrejevic, 2011; Hearn, 2010).

What new styles of selfhood and self-presentation, ideas about our interiority, forms of social status, and arbiters of "authenticity" are being generated, propagated, and authorized in the wake of big data and the rise of affective capitalism? How are they functioning, for whom, and to what end? And what can these emergent "truths" about the self tell us, in turn, about the almost entirely opaque systems of machine-learning, algorithmic social sorting, and capital accumulation that lie beneath them?

This article takes up the issues of selfhood and self-presentation in the era of affective capitalism by first tracing some "ideal types" of selfhood posited by a variety of postwar critics, and then briefly describing the contemporary political economic context within which current forms of self-presentation are generated, defined, and circulated. It then examines what many might consider a prosaic example of these processes—the Twitter verification checkmark. The article figures the verification checkmark as both an affective lure that summons and incentivizes specific styles of self-presentation, and a portal through which we can follow capitalist logics as they work to condition and, ultimately, subsume the impact and significance of the millions of forms of self-presentation generated online daily. The article goes on to explore new technologies of identity management that work to conflate digital citizenship with financial citizenship, linking everyday forms of self-presentation with the structural logics of capitalist accumulation. Beneath the gauzy promises of democratized access to sociality, meaning, fame, and reputation, the business practices of the social platforms in and through which we self-present draw us all into privatized corporate strategies of social sorting, identity management, and control. These developments are symptomatic of what Byung-Chul Han (2015) calls a "transparency" society, in which "the capitalist economy subjects everything to compulsory exhibition" and the work of self-presentation, "the staging of display, alone generates value" (p. 11). To conclude, the article posits a new "ideal type" of selfhood for the big data age.

## The ideal type

As Max Weber (2003) has famously argued, the proposition of an ideal type—of individual, concept, or practice—is a crucial sociological method. For Weber, an ideal type is "a complex of elements associated in historical reality which we unite into a conceptual whole from the standpoint of their cultural significance" (p. 47). The ideal type is never found in a "pure" state out in the world; instead, it is a fiction, a unified, analytical abstraction that "must be gradually put together out of individual parts which are taken from historical reality to make it up" (p. 47). As a practice of sociology, the positing of an ideal type necessarily involves "the one-sided accentuation of one or more points of view" (Weber, 1949, p. 90), and, as a result, recognizes the inherent subjectivity of all knowledge and the subsequent duty of sociologists to "stand up" for their own ideals (Weber, 1949, p. 58). Following Weber, members of the Frankfurt School developed the method of the

ideal type in the service of trenchant cultural criticism, using posits like "one-dimensional man" (Marcuse, 1991) and "the authoritarian personality" (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1993) in order to enact a critique, or the "public sphere" (Habermas, 1991) in order to assert a normative goal (Holmes, 2002). In these cases, the generation of an ideal type was explicitly intended to facilitate a diagnosis of the operations and costs of capitalism writ large.

Following from the work of Weber and members of the Frankfurt School, many notable critics throughout the 20th century have proposed "ideal types" in order to "show the links between the major articulations of power and the more-or-less trivial aesthetics of everyday life" (Holmes, 2002). In this way, they worked to assess and understand the social, political, and cultural effects of life under consumer capitalism. Psychologist and critic Philip Cushman (1990), for example, contends that the burgeoning consumer landscape post World War II brought us an "empty self" who must perpetually consume in order to be effectively organized and identified, but who can never be entirely satiated. Anthony Giddens (1991) characterizes selfhood as a "reflexive project" involving the self-conscious development of a coherent narrative of self; in the wake of our disembeddedness from traditional centers of authority, this reflexive project of self-making is the only remaining continuity, or through-line, in our lives. Zygmunt Baumann (2001) concurs: "It is me, my living body or that living body which is me, which seems to be the sole constant ingredient of the admittedly unstable, always until further notice composition of the world around me" (p. 22). With these thinkers, the postwar self is figured as an insatiable, self-involved, consuming machine.

In *The Birth of Biopolitics* (2008), Michel Foucault traces a shift in the figure of "homo economicus" from "a partner in exchange" under Keynesian liberalism to an "entrepreneur of himself, being for himself his own capital, being for himself his own producer, being for himself the source of (his) earnings" (p. 226) under neoliberalism. For Foucault, neoliberal society figures consumption itself as an "enterprise activity," a form of production serving to satisfy the demands of all of us as "human capital" (p. 226). Paul Du Gay (1996) develops these insights, noting the rise of an "enterprise culture" in the workplace, which regards "certain enterprising qualities—such as self-reliance, personal responsibility, boldness and a willingness to take risks … as human virtues" (p. 60); here, workers are increasingly expected to be "entrepreneurs of the self" (p. 70), engaged in the "continuous business of living to make adequate provision for the preservation, reproduction, and reconstruction of (their) own human capital" (Gordon, 1991, p. 44).

Eva Illouz (2007) traces the ways in which Freudianism, as it was disseminated in scientific discourse and popular culture in the early part of the 20th century, resulted in new kinds of identity symbols and new emotional styles of selfhood predicated on the outward struggle for personal authenticity and truth. Focusing specifically on the impact of popular psychology on workplace management practices, Illouz notes the rise of a new "communicative ethic … involving emotional and linguistic self-management" (p. 21) to the top of the list of required workplace skills. These conditions herald a "realignment of emotional cultures" and signal the entrenchment of emotional capitalism, which "has affect at the very heart of its transactions" (p. 23). Under these conditions, the economic self becomes emotional and personal emotions are "more closely harnessed to instrumental action" (p. 23).

The dominance of emotion over logic and reason in public life is an outcome of the intensification of advertising and marketing post war, which has produced what Andrew Wernick (1991) calls a promotional culture. For Wernick, the logics of promotionalism have saturated our lives, creating a condition where the manipulation of affective flows and the governance of attention have come to displace expertise, experience, or fact. In this context, the self, increasingly subject to the logics of promotion, becomes a "commodity sign," extending and doubling its role as repository of labor power, functioning both as a worker and as a bearer of a promotional message about work and social value in general. Wernick describes it this way: "a subject that promotes itself, constructs itself for others in line with the competitive imaging needs of the market. Just like any other artificially imaged commodity, then, the resultant construct is a persona produced for public consumption" (p. 192).

In the early 2000s, against the backdrop of neoliberal economic conditions of crisis, austerity, unemployment, and persistent precarity, critic Brian Holmes (2002), drawing from the work of Paolo Virno, Francois Lyotard, and others, identifies the rise of the flexible personality—an individual cynically and opportunistically ready to adapt his or her capacities and turn on a dime in order to secure a living. For Holmes, the flexible personality is the result of capitalism's appropriation of the artistic and political revolutionary energies of the 1960s, and now functions as "a form of governmentality … and 'soft coercion.'" Following from this, and given the proliferation of new technologies and social media platforms throughout the 2000s, I, along with many other critics, have traced the emergence of the ubiquitously connected self-brander (Banet-Weiser, 2012; Hearn, 2008, 2010; Senft, 2013). Since "I" am the only reliable constant in my working life, "I" should work hard to sell my special something to the world via the technological affordances made available to me. Self-branding is "a form of affective labor that is purposefully undertaken by individuals in order to garner attention, reputation and, potentially, profit" (Hearn, 2010, p. 427).

This very brief summary of some of the ideal types of "selfhood" critics have proposed over the past 60 years highlights the ways in which our ideas about our selves and our styles of self-presentation are conditioned by market forces and changes in the forms and structure of work. As Brian Holmes (2002) argues, we must never lose sight of the "hardened political and economic frames" within which dominant ideas about the "self" and modes of self-presentation emerge. Currently, these frames and contexts include the dominance of global transnational finance capital, the growth of precarious work and immaterial labor, the "sharing economy," unpaid internships, and, of course, the intensification of ubiquitous computing, social media platforms, and big data analytics.

## Contemporary frames and contexts of self-presentation

The past four decades have seen manufacturing and production in most sectors of the economy stagnate or decline, while the financial sector has grown dramatically. The growth of the financial industries has also resulted in a more general diffusion of their logics, discourses, and practices across the economy and culture at large. These processes of "financialization" have been fueled by state deregulation of labor codes and financial markets, which have allowed nonfinancial industries to take on characteristics of financial institutions, banks to focus less on private lending and more on trading, thereby

transforming their debtors into sources of profit and encouraging individuals and families to become increasingly indebted in order to access life necessities such as education and health care (Lapavitsas, 2013, p. 3–4). Undergirded as it is by entrenched power elites who espouse neoliberal governmental ideologies protecting free markets and free trade, financialization represents a shift in emphasis from the sphere of production to "the ballooning sphere of circulation" (p. 3)—resulting in a condition Costas Lapavitsas (2013) calls "profiting without producing" (p. 323). In spite of the global economic crisis of 2008, then, "the influence of capital markets, their intermediaries and processes in contemporary economic and political life"' (Pike & Pollard, 2010, p. 30) continues to grow, as practices of financial speculation, including "venture capital buyouts, public-private finance initiatives, international ratings agencies and bond markets" come to set "the conditions of development for both nonfinance capital and state services" (Gilligan & Vischmidt, 2015, p. 613).

The shift from production to circulation signaled by the rise of financialization, and dramatic technological developments and the concomitant growth and clout of technology industries, have led to major changes in the labor market. As production has decreased, the service economy has grown, and forms of "immaterial labor" that produce an "immaterial" product, such as a line of computer code, a sexual experience, or a pleasant dining experience, have become dominant (Lazzarato, 1996). As Illouz (2007), duGay (1996), Maurizio Lazzarato (1996) and others have noted, workers are now required to put their "soul" to work (Berardi, 2009) in order to generate good experiences, communicate, innovate, and create. In the context of these qualitative changes in the nature of work, we also have seen the rise of the "sharing" economy, which ostensibly involves the collaboration of people and businesses in "sharing" and distributing goods, services, or the abilities of individuals. While "sharing" connotes equity and cooperation, many "sharing" intermediaries that provide the platforms in and through which the sharing takes place, such as Uber or AirBnB, make a tidy profit at the expense of those who offer their goods or services (Asher-Schapiro, 2014; Gilligan and Vishmidt, 2015). We have also seen the development of the "gig economy" or "permalancing" (Sundararajan, 2015), which involves the entrenchment of short-term, precarious, subcontracted jobs, and the normalization of unpaid internships for young adults looking to break into the job market.

While proponents celebrate the flexibility and autonomy inherent in these new working conditions, critics suggest that they are endangering the life chances of an entire generation of workers, weakening labor protections and driving down wages. No matter how one defines the problems or opportunities behind these new labor market conditions, it is clear that the highly individualized, entrepreneurial spirit at work, first described by Foucault, has become the new normal, as workers are increasingly compelled to navigate the uncertainties and perpetual crises of global finance capitalism on their own and at their own peril.

Technological developments in ubiquitous computing, social media, and big data, of course, are deeply intertwined with broader economic processes of financialization and labor market transformations. Not only are financial markets now driven by high-frequency trading, which generates complex algorithms that exploit miniscule price discrepancies to buy and sell in fractions of a second (Levenson and Bennet, 2014), a whole new set of businesses have been generated in the wake of big data. Indeed, when the World Economic Forum declared data "a new class of economic asset, like currency or gold" (Lohr, 2012) in 2012, it was only beginning to envision the ways in which processes

of data analytics would profoundly change the operations of a wide range of industries, from retail, to entertainment, manufacturing, health care, and beyond.

With the amount of data generated daily now averaging 2.5 quintillion bites (IBM, 2016), data industries specializing in analytics, database management, and data storage, security, and access have been growing steadily. And since much of the lucrative raw material for the generation of meaningful data is human sociality and feeling expressed via forms of self-presentation online, industries specializing in mining, selling, and shaping those feelings and opinions have been growing apace. As Joe Turow (2011) describes, new data exchange companies, such as eXelate and Blue Kai, use cookies to track information about consumers as they move across the Web. The data is then parsed into information about consumers' intent and ability to purchase, effectively sorting individuals into categories of those whose attention matters and those who are considered "waste" (p. 88). In what can only be described as the apotheosis of personalized, just-in-time marketing, advertisers then engage in "real time bidding" for the attention of individuals at "virtually the moment they load the page of the site they're visiting" (p. 79). Social media "intelligence" services, such as Sysomos or Radian6, offer to find the profit in our sociality by tracking, analyzing, and "optimizing" a company's reputation for a fee. And more recently, businesses like Klout and Peerindex claim to provide an "objective" measure of users' social media reputation and "influence" in the form of a numeric score out of 100 in exchange for access to users' social media activity. These companies monetize themselves by working with brands and retailers to offer "perks" in the form of goods or services to their users for attaining higher scores and becoming more "influential." While these sites promise enhanced social media status in the form of a high score, in effect they are simply a form of target marketing, working to identify opportunities for further value creation both for themselves and their corporate clients. The incentive of the personal score, of course, also helps to generate more valuable personal data that can be captured, mined, and sold.

Social media influence measurement systems are emblematic of the rise of the so-called "reputation" economy online (Klein, 2013; Schwabel, 2011). On websites such as YouTube and Instagram it is now entirely commonplace for individuals to monetize themselves by working to develop legions of followers or subscribers—no need for television networks or other cultural intermediaries. Indeed, in the context of an exhausted neoliberal political economic system marked by perpetual crisis and austerity, where traditional jobs are disappearing and there is growing employment precarity, achieving a reputation for having a reputation has come to seem a reasonable life goal for many people. The acquisition of a good "reputation" has also come to play a central role in the "sharing economy" via reviews and recommendations, even as what constitutes a "good reputation" is defined and delimited in advance by the platforms that supposedly facilitate the "sharing" (Hearn, 2010). Against the backdrop of global finance capital, proliferating social media platforms, mobile technologies, and big data analytics, then, forms of self-presentation and the data they generate have come to function as a new form of currency and, more generally, value. But what is the link between the pursuit of monetizable online social status and reputation and the business practices of the platforms and affordances that make that pursuit possible. Who really benefits from the exchange of personal data for social status?

## The Twitter verification checkmark

The issues of self-presentation, reputation seeking, and capital value extraction can be elucidated further through an examination of perhaps the most sought-after online user status badge of all—the Twitter verification checkmark. The verb "verify" generally means to "confirm," "support," or "substantiate" the truth or authenticity of some event, thing, or person. In rare instances of usage, however, "verify" can also mean "to 'cause' to appear truthful or authentic" ("Verify," 2002). Following from these definitions, two inflections of the term "verified" are considered here. The first understands verification as an affirmative authentication and approval of identity around which users' desires and affective investments circulate. The second inflection positions verification as a disciplinary mode of regulation enacted by a private or state institution that claims authorization over legible and/or "authentic" forms of identity but that, in effect, "causes" legitimate forms of identity to appear.

### *Affective investment and social sorting*

Twitter launched its user accounts verification program in beta form in the summer of 2009 after receiving several complaints about impersonation from high profile users such as Kanye West (Rao, 2009); it has since verified approximately 187,000 accounts (Kapko, 2016). Twitter's verification program is intended to "let people know that an account of public interest is authentic" (Twitter, 2016), generally defining accounts held by artists, musicians, celebrities, politicians, and journalists as constitutive of the "public interest." Twitter also makes it clear that the verification of an account does not imply endorsement of the verified party (Twitter, 2016). The benefits of holding a verified account include access to additional filters in the notifications section, access to Twitter analytics, and the ability to opt out of group messages (Tsukayama, 2016). The other obvious benefit is that verified accounts tend to show up more frequently in Internet searches, potentially increasing visibility, reach, and user engagement for verified customers. Most significantly, for many people, the verification checkmark is considered a status symbol, signifying social influence and personal clout (Dash, 2013).

Twitter insists that its verification process is conducted by people, not machines, does not rely on number of followers or tweet counts, and that the criteria for deciding who gets verified are constantly updated (Dash, 2013). Until recently, Twitter did not accept verification requests from users; it simply bestowed verification when it saw fit. Even with the recent change allowing users to apply for verification, Twitter still has the final say, reserving the right to turn down requests without explanation (Tsukayama, 2016). Beyond its promise to verify those accounts it deems to be in the public interest, the reasons behind Twitter's decisions to verify remain entirely opaque. Indeed, while the Internet is full of blogs and websites with instructions about how to get verified, most of them are hoax sites or generally state the same thing: There is no way to game the system, the whole process is completely black boxed. In the words of blogger Anil Dash (2013), the verification process is "straight up an old boys club," with Twitter employees deciding, with no accountability, who gets in.

It is likely this "don't ask for it, we will give it to you when we decide you deserve it" process that has generated such widespread affective investment in the truth and power behind the check mark, and such excitement when a person gets verified. A search of

YouTube reveals dozens of videos portraying user reactions to receiving the Twitter verification checkmark. Vlogger Matthew Santora (2014) proclaims, "I'm gonna try not to freak out, but I got Twitter verified today! I have been waiting to get verified on Twitter longer than any other social network." Gamer FaZe Rug (2015) can't believe his luck, shouting, "Oh my God, this is awesome! This is so sick! I can't believe it! Last night I was feeling like complete shit … and then I wake up and I'm verified!" Rachel Vlogs (2016) bounces in her chair singing, "I'm verified! That's awesome! Thank all you guys who follow me!" and rapper Jae Lyrix (2012) says humbly, "I've been verified on Twitter. It's a blessing. To me it's just a stepping-stone to all the other things I want to do in life. I didn't expect to get verified so quick but, you know, through God all things are possible."

When users are contacted for verification, they are told they are three quick steps away from earning their verification badge. The site then takes them through a short quiz predicated on helping them learn "how to tweet effectively." The lessons include learning how to double follower rates by live tweeting events, engaging more followers by asking them questions and inviting them to a live question-and-answer period, and increasing likes, retweets, and favorites by including visuals and photos. Finally, Twitter encourages the user to like and follow other verified accounts in order to increase their own "truthworthiness." At the end of the quiz, Twitter asks newly verified users to provide their phone number "in case there is a security issue" (Dash, 2013).

Certainly, the responses to Twitter verification documented on YouTube indicate the degree of affective investment many people place in achieving the checkmark. Like Klout, Peerindex, and other social influence scoring metrics, the Twitter verification checkmark promises the glamour of elite access and social mobility, and legitimates attention-getting forms of self-presentation as the means to achieve social recognition and, potentially, profit; by getting verified, Twitter implies that new worlds of reputational capital will open up to its users. The exhortations to learn how to "tweet effectively" in order to receive verification, however, clearly expose the promotional, self-serving logics of Twitter itself.

In reality, the verification process works to instantiate a new kind of social sorting, or social class, predicated entirely on a form of "reputation" that Twitter itself defines, attributes, and then validates in an opaque, unaccountable manner. In this way, Twitter installs itself as a powerful arbiter of social status and value in a promotional culture and a "gig economy" where influence and high visibility are increasingly central to job stability and monetary success. As it comes to challenge more traditional forms of identity authorization, such as passports or medical certificates, however, it must be noted that the checkmark is far from an innocent indicator of a user's "actual" identity or influence; rather, it is a careful construction with an entirely instrumental purpose. It functions as a "free lunch inducement" (Smythe, 1977) that works to push users into revealing more about themselves and generating more data grist for the mill of the "capta" miners. The message to those who seek out and attain the verification checkmark is clear: Build an effective self-brand, cultivate a following and a reputation, and, most importantly, always be communicating.

The exchange of constant self-presentation and communication for perceived social relevance and status does not come without a cost, however. Indeed, the request for a phone number and personal details as a part of the verification process provides a portal into the hidden abode of value production on Twitter, and gives us insight into the more disciplinary and regulatory implications of the term "verification."

## Digits, user identity management, and mobile payment

When Jack Dorsey conceived Twitter in 2006, he saw it primarily as a "social utility" intended to allow users to exchange messages on their mobile phones (El Akkad, 2014, p. B8). As a result, Twitter initially focused on amassing users via its microblogging service (Smith, 2009). It has since gone on to try several different revenue models, including selling Google and Microsoft the rights to include its posts in their search functions and growing its advertising arm through the development of sponsored content, "Promoted Tweets," and "Promoted Trends" (Van Dijck, 2011). In spite of these efforts, however, Twitter has continued to suffer from a "corporate lack of existential clarity" (Kiss, 2015), and has seen its user numbers and engagement levels remain stagnant since it went public in 2013. This, of course, has meant problems for its advertising revenue and stock valuation.

In the face of these problems, Twitter has shifted its focus from being a microblogging provider toward becoming a "mobile services" company, seeking to join Apple, Facebook, Google, and Amazon in the race to generate and capture "the corporate world's most valuable commodity"—user data (El Akkad, 2014). One of the ways Twitter is doing this is by targeting app developers via a software development kit called Fabric. Fabric consists of a set of developer tools that includes crash reporting, beta testing, a mechanism to monetize advertising, and, most crucially, a way to streamline user login (Lachlan, 2014). By targeting developers with Fabric, Twitter can embed and extend its codes and services into the larger Web, thereby gaining access to the personal data of Web users beyond its subscribers.

One of the central features of Fabric is a user identity management platform, or mode of "user onboarding," called Digits. Digits allows users to sign into the app with their phone number rather than a user name and password. The service then sends a text message to the phone number to confirm identity, and from there the user has easy access to the other apps and sites subscribed to the service (El Akkad, 2014, p. B8). App developers who use Digits no longer have to manage individual relationships with different mobile carriers, and users no longer have to remember a series of different passwords and user names; with Digits, user identification is reduced simply to their SIM card. Twitter, in turn, gets access to the user data generated by a "whole ecosystem of apps that aren't made by twitter, don't necessarily run the company's core micro-blogging service, but still use twitter-developed code" (El Akkad, 2014, p. B8). Access to this very large pool of data allows twitter to fine-tune the targeting algorithms for its own advertising business and to sell the data it collects to a range of other companies. For example, in a potent marriage of data with "capta" technologies, in 2014 Twitter entered into partnership with IBM, marrying its data firehouse of over 6,000 tweets a second to IBM's Watson data analytics computing capacity. IBM is promising to use the data to enhance its business analytics and a range of other ventures, such as talent management and product development (IBM, 2014). Meanwhile, the data-licensing arm of Twitter's business grew 48% in the first quarter of 2016 to $70 million (Flynn, 2016).

For many prominent new technology companies, including Facebook, Google, and now Twitter, processes of identity management and security are central to their capital accumulation strategies. Insofar as data is currency and each individual user is the source of that currency—a veritable "data geyser" (El Akkad, 2014, p. B8)—then creating the

conditions for frictionless and easy movement and transferability of individual users across platforms, devices, and apps is crucially important. The easier it is for users to watch, chat, shop, and post seamlessly across apps and platforms, the more data are generated and the more they can be mined to enhance in-house advertising and sold to companies like IBM. All of these companies are now vying to be the chosen middleman that can facilitate users' easy movement across the Web.

A major impetus behind the race to streamline and standardize user logins and modes of identity verification is the recent growth in mobile payment and transaction systems. Mobile payment systems (MPS) eliminate the need for cash, debit or credit cards, or any kind of identification for that matter, putting the mobile phone, its infrastructure, hardware, and user identity software at the center of all forms of market exchange. With MPS, users can pay for goods and services with their phones via SMS message, charge an item to their mobile phone accounts, use a QR code, or any number of online wallets, such as Amazon Payments or Google Wallet (Knoll, 2012). Mobile pay systems have been growing steadily in North America for the past few years, with use expected to grow 210% in 2016 to a total of $27.05 billion in sales (Emarketer, 2015).

In processes of mobile payment, and, indeed, all forms of e-commerce, payment and transaction components, specifically user identity verification, have been circulatory choke points. But with Twitter's proposal to reduce users to their mobile phone number or SIM card, what telecomm insiders call the "last mile"—"usually the most costly and technically challenging" final stretch in the process of virtual exchange, "linking the backhaul infrastructure" with the front-end user/consumer (Manzerolle & Kjosen, 2014, p. 161)—is rendered smooth and easily navigable. This, along with the fact that it has always focused on mobile computing, gives Twitter a small edge in the user identity management race (El Akkad, 2014, p. B8).

Twitter's entry into the identity management and verification market is evidence of a major convergence now taking place between banks and financial institutions and the telecomm, new media, and retail giants. While large retailers are launching their own consumer banks, payment services, and credit cards, telecomm operators are acquiring bank licenses, and banks are partnering with telecomm operators and, in some cases, acquiring their own telecomm licenses to provide financial services over mobile networks (Hernaes, 2015). This trend is specifically prominent in the Global South where major industry consortia are looking to harness these practices as a way to gain access to the worlds' 2 billion "unbanked" or "underbanked" populations—those poor or marginalized people who do not have access to traditional banking processes (Hernaes, 2016). M-PESA in Kenya, a subsidiary of mobile telecomm giant Vodaphone, offers bill payment services, loan disbursement and repayment, and links to other banking products as well as its own debit card (Masinde, 2016). And Telenor Telecomm Group, which operates in Pakistan among other places, not only offers mobile payment and transaction services, but life insurance as well (Bhasin, 2016).

Industry convergence moved a step further into the data generation market recently, when, in an effort to enhance security, Telenor introduced a program to tie individual users to their SIM cards by fingerprinting them. This effort has resulted in an extremely valuable database including the personal information, SIM cards, and fingerprints of 50 to 60 million people; thus, "while Google and Facebook have to guess who you are, Telenor … is becoming a central repository for names, addresses, finances, and in the near term … health and education

records as well" (Shahani, 2016). As a result, in Asia at least, Telenor has positioned itself as a powerful gatekeeper of user identification, rivaling the efforts of national governments to track and manage their populations.[1]

As Rachel O'Dwyer (2015) argues, industry convergence between financial services and telecomm, and the identity management techniques at their center, "expand[s] already existing forms of financial enclosure from the first world to the world's poorest communities" (p. 238). By turning social agents into economic agents, these privatized mobile payment systems displace already existing networks of sociality and trust around processes of exchange, "undermining the social capital that existed prior to mobile remittances, such as face to face microfinance institutions and informal and episodic networks between friends and families" (p. 239). So, while advocates might argue that the deployment of mobile banking for "underbanked" populations is socially inclusive and community-building (Hernaes, 2016), it is more likely that these processes weaken the social institutions and practices that have traditionally shaped dominant forms of self-presentation and generated trust and reputation.

As money is virtualized and consumer transactions are datafied, and given that these processes are enclosed and privatized, we will inevitably see new forms of governmentality emerge. Indeed, the conflation of digital inclusion with financial inclusion is now driving several nascent attempts to generate secure global, borderless identity systems. The United Nations has identified a goal to provide a "legal identity" for the entire world population by 2030, and the World Bank launched the Identity for Development Program (ID4D) in 2014, stating that "21st century digital technologies, including biometrics … are providing a unique opportunity … to build a robust and efficient identification system at a scale previously not achievable" (World Bank, 2016, p. 2). In the private sector, Facebook, Bitcoin, and Deloitte, among others, are working to develop secure frictionless digital identities that will move beyond third-party identity management with the use of blockchain technologies (Hernaes, 2016). As Kate Crawford (2013) reminds us, however, the processes of machine learning and data analytics that undergird forms of identity management have already existing social assumptions, biases, and inequities baked into them; given this and the developments described in the preceding paragraphs, it will most certainly be the poor, indebted, and marginalized who will pay the heaviest price for their "digital and financial inclusion" with increased levels of surveillance, monitoring, and government control.

## The anticipatory, speculative self

How then might we configure the role of self-presentation and an ideal type of selfhood in the era of big data and affective capitalism? As we have seen, with the development of ecommerce and mobile payment, the market is no longer a delimited set of places in the material world, but is now an ever-expanding field of virtual points for commodity

[1]It should be noted that while Apple, Samsung, and other mobile phones now have Touch ID, user fingerprints are encrypted and stored on the hardware of the phone itself. Apple, for example, promises that none of the apps operating on the phone or even its own operating system can access a user's fingerprint. This may change soon, however, as Apple filed a patent in 2015 to enable storage of user fingerprints in the cloud, ostensibly to enable users to sync their fingerprints across devices (see Beres, 2015; Steinberg, 2013).

exchange (Manzerolle & Kjosen, 2014, p. 147). Under these conditions, value generation lies in removing any and all impediments to the circulation of commodities, consumers, forms of self-presentation and expressivity, and their product, data. Here, individuals "are cast as quasi-automatic relays of a ceaseless information flow" (Terranova, 2013), or figured as mere data outputs working to ensure "the often serendipitous reunion of commodities and money" (Manzerolle & Kjosen, 2014, p. 133). The grease behind this constant data generation is provided by free-lunch inducements like the Twitter verification checkmark, whose promise of social status and high visibility encourages users to perpetually work at posting and crafting themselves online. Under current volatile economic conditions, however, this kind of attention seeking and identity building is no longer voluntary so much as it is "enforced—a survival discipline for disinvested populations" (Gilligan & Vischmidt, 2015, p. 613). As Maurizio Lazzarato (2011) argues, today's crisis-ridden neoliberal capitalism "combines 'work on the self' and labor in its classical sense," noting that "the modern notion of 'economy' covers both economic production and the production of subjectivity" (p. 11).

It is also crucial to bear in mind that while our forms of self-expression and social connections are absorbed as natural resource by companies like Twitter and rendered into capta by places like IBM, the capta abstractions and categories produced develop alongside us, and ultimately are projected back onto us, enframing us in what John Cheney Lippold (2011) has called an "algorithmic identity—an identity formation that works through mathematical algorithms to infer categories of identity on otherwise anonymous beings" (p. 165). These algorithmic categories, which are defined by the interests of those authorizing the analytics in the first place, ensure an ongoing, modulating form of (primarily corporate) control. The implications for processes of self-presentation are clear; as Cheney-Lippold argues, "the automated categorization practices and the advertisements and content targeted to those categorizations effectively situate and define how we create and manage our own identities" (p. 177).

While algorithms work to infer who and what we will be or want in the future from our past actions, the predictive capacity of machine-learning and data analytics in general play a central role in what Adams, Murphy, and Clarke (2009) have called "regimes of anticipation." Increasingly, fields such as biomedicine, finance, marketing, and social media all involve the constant striving to "optimize" humans via the imposition of some kind of predictable "pre-constituted future" based on a range of probabilistic outcomes (p. 247). The practices of "speculative forecasting" that characterize these fields encourage us to "inhabit degrees and kinds of uncertainty—adjusting ourselves to routinized likelihoods, hedged bets and probable outcomes" (p. 247). Anticipation, then, becomes a generalized affective condition that gives rise to modes of subjectivity that are constantly shuttling back and forth between "the is and the ought, consummately modern yet augmented by anticipation in ways that undermine the certainties on which modernity thrives" (p. 255). Fueled by the rise of predictive data analytics, informed by the logics of finance capital and the labor transformations that have developed in its wake, and conditioned by the speculative practices of online attention brokers, then, we could argue that these regimes give rise to a "speculative" subject of big data. This form of subjectivity is focused not on holistic forms of self-representation or self-knowledge, or even self-interest, but rather on the maintenance of always malleable sets of anticipatory and liquid capacities,

intended to act as a hedge against the high risk, unpredictable (presumably algorithmically computed) forms of appreciation and depreciation generated from elsewhere.

And so, we can posit a move from the "flexible personality" of the late 1990s and the "self-brander" of the 2000s, to the "anticipatory, speculative self" of 2016. Here, the pursuit of meaningful individual identity, autonomous forms of self-presentation, and processes of self-valorization have come to function in an entirely different register; their actual intent, content, or outcome matter little—what matters is that they are pursued, and ceaselessly, relentlessly so. "Verified" not by the state, or the police, or even our social networks, but by privately owned telecom and technology industries and financial institutions, spurred on to assiduously self-present by the hyperpersonalized affective lures and bribes like the Twitter checkmark, we are inserted into the global flows of capital in all our specificity and yet simultaneously stripped of our meaningful identities, reduced to our SIM card. Mirroring the speculative logics of finance capitalism, the speculative self's value is predicated entirely on externally generated predictions about our future potential "optimization." To borrow a term introduced by Nick Dyer-Witheford (2001), under these conditions, we become quantified, global value subjects, and increasingly indebted ones at that.

What does the emergence of this anticipatory, speculative type of selfhood imply for the future of collectivity and the commons? How is it possible to develop a politics, or notion of the polis, from disaggregated, instrumentalized "dividuals" (Cheney-Lippold, 2011), whose gestures of sociality and senses of self are prefigured in advance by the logics of digital finance capital? To be sure, it seems a daunting task. But the hope here lies in the always incomplete and unstable nature of capitalist appropriation and its modes of subjection, and in the thoroughly intractable mystery of reflexive, critical human consciousness, which, in the end, these developments both exploit and enable.

## References

Adams, V., Murphy, M., & Clarke, E. (2009). Anticipation: Technoscience, life, affect, temporality. *Subjectivity*, *28*, 246–265. doi:10.1057/sub.2009.18

Adorno, T., Frenkel-Brunswik, E., Levinson, D., & Sanford, R. N. (1993). *The authoritarian personality*. New York, NY: W. W. Norton.

Andrejevic, M. (2011). The work that affective economics does. *Cultural Studies*, *25*(4–5), 604–620. doi:10.1080/09502386.2011.600551

Asher-Schapiro, A. (2014, April). Against sharing. *Jacobin*. Retrieved from https://www.jacobinmag.com/2014/09/against-sharing/

Banet-Wesier, S. (2012). *AuthenticTM: The politics of ambivalence in a brand culture*. New York, NY: New York University Press.

Baumann, Z. (2001). Consuming life. *Journal of Consumer Culture*, *1*(1), 1–29.

Berardi, F. (2009). *The soul at work: From alienation to autonomy*. New York, NY: Semiotexte.

Beres, D. (2015 January, 15). Apple wants to beam your fingerprint to new devices. *The Huffington Post*. Retrieved from http://www.huffingtonpost.com/2015/01/15/apple-fingerprint_n_6480088.html

Bhasin, T. (2016, February). Use Telnor's free life insurance to increase your coverage. *Business Standard*. Retrieved from http://www.business-standard.com/article/pf/don-t-opt-for-telenor-s-mobile-service-for-free-life-insurance-116022700545_1.html

Cheney-Lippold, J. (2011). A new algorithmic identity: Soft biopolitics and the modulation of control. *Theory, Culture and Society*, *28*(6), 164–181. doi:10.1177/0263276411424420

Clough, P. T., Gregory, K., Haber, B., & Scannell, J. R. (2015). The datalogical turn. In P. Vannini (Ed.), *Non-representational methodologies: Re-envisioning research* (pp. 146–164). New York, NY: Routledge.

Crawford, K. (2013, April). The hidden biases in big data. *Harvard Business Review*. Retrieved from https://hbr.org/2013/04/the-hidden-biases-in-big-data

Cushman, P. (1990). Why the self is empty: Toward a historically situated psychology. *American Psychologist*, *5*(4–5), 599–611. doi:10.1037/0003-066X.45.5.599

Dash, A. (2013). *What it's like being verified on twitter*. Retrieved from http://anildash.com/2013/03/what-its-like-being-verified-on-twitter.html

Du Gay, P. (1996). *Consumption and identity at work*. Thousand Oaks, CA: Sage.

Dyer-Witheford, N. (2001). The new combinations: Revolt of the global value subjects. *CR: The New Centennial Review*, *1*(3), 155–200. doi:10.1353/ncr.2003.0063

El Akkad, O. (2014, November 22). Different circles: Twitter's new growth plan. *The Globe and Mail*, p. B8.

Emarketer. (2015,October). Mobile payments will triple in the U.S in 2016. Retrieved from http://www.emarketer.com/Article/Mobile-Payments-Will-Triple-US-2016/1013147

Flynn, K. (2016, April 4). Twitter data business growing as Jack Dorsey courts developers. *International Business Times*. Retrieved from http://www.ibtimes.com/twitter-data-business-growing-jack-dorsey-courts-developers-2348193

Foucault, M. (1989). *The archaeology of knowledge and the discourse on language*. Milton Park, UK: Routledge.

Foucault, M. (2008). *The birth of biopolitics: Lectures at the College de France 1978–79*. (G. Burchell, Trans.). New York, NY: Palgrave Macmillan.

Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford, CA: Stanford University Press.

Gilligan, M., & Vischmidt, M. (2015). "The property-less sensorium": Following the subject in crisis times. *South Atlantic Quarterly*, *114*(3), 611–630. doi:10.1215/00382876-3130778

Gordon, C. (1991). Governmental rationality: An introduction. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault effect* (pp. 1–51). London, UK: Allen and Unwin.

Habermas, J. (1991). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. Boston, MA: MIT Press.

Han, B. (2015). *The transparency society*. Stanford, CA: Stanford University Press.

Hearn, A. (2008). "Meat, mask, burden": Probing the contours of the branded self. *Journal of Consumer Culture*, *8*(2), 197–217. doi:10.1177/1469540508090086

Hearn, A. (2010). Structuring feeling: Web 2.0, online ranking and rating, and the new reputation economy. *Ephemera: Theory and Politics in Organization*, *10*(3–4), 421–438. Retrieved from http://www.ephemerajournal.org/contribution/structuring-feeling-web-20-online-ranking-and-rating-and-digital-%E2%80%98reputation%E2%80%99-economy

Hernaes, C. (2015, April). Industry convergence in financial services is accelerating. *Techcrunch*. Retrieved from https://techcrunch.com/2015/04/27/industry-convergence-in-financial-services-is-accelerating/

Hernaes, C. (2016, July). You can't have financial inclusion without tech inclusion. *Techcrunch*. Retrieved from https://techcrunch.com/2016/07/15/you-cant-have-financial-inclusion-without-digital-inclusion/

Holmes, B. (2002). The flexible personality: For a new cultural critique. *European Institute for Progressive Cultural Policies*. Retrieved from http://transform.eipcp.net/transversal/1106/holmes/en

IBM. (2014). *Twitter and IBM form global partnership to transform enterprise decisions*. Retrieved from https://www-03.ibm.com/press/us/en/pressrelease/45265.wss

IBM. (2016). *Bringing big data to enterprise*. Retrieved from https://www-01.ibm.com/software/data/bigdata/what-is-big-data.html

Illouz, E. (2007). *Cold intimacies: The making of emotional capitalism*. Cambridge, UK: Polity Press.

Kapko, M., (2016, July). How and why to verify your Twitter account. *PCWorld*. Retrieved from http://www.pcworld.com/article/3099095/software-social/how-and-why-to-verify-your-twitter-account.html

Kiss, J. (2015, November 4). Jack Dorsey has an impossible task: To make Twitter better. *The Guardian*. Retrieved from https://www.theguardian.com/technology/2015/nov/04/twitter-jack-dorsey-impossible-task

Kitchin, R., & Dodge, M. (2011). *Code/space: Software and everyday life*. Boston, MA: MIT Press.

Klein, J. (2013). *Reputation economics: Why who you know is worth more than what you have*. New York, NY: Palgrave MacMillan.

Knoll, M. (2012, December). Mobile payment overview: Definition, trends and payment systems. *Trendblog*. Retrieved from http://trendblog.net/mobile-payment-overview-definition-trends-and-payment-systems/

Lachlan, S. (2014, October). Is Twitter running in 'geometric eccentric circles' or just round in circles? *Diginomica*. Retrieved from http://diginomica.com/2014/10/28/twitter-running-geometric-eccentric-circles-just-round-circles/#.VFe9XfZH1FQ

Lapavitsas, C. (2013). *Profiting without producing: How finance exploits us all*. New York, NY: Verso.

Lazzarato, M. (1996). Immaterial labor. In P. Virno & M. Hardt (Eds.), *Radical thought in Italy: A potential politics* (pp. 133–146). Minneapolis, MN: University of Minnesota Press.

Lazzarato, M. (2011). *The making of the indebted man* (J. D. Jordan, Trans.). New York, NY: Semiotexte.

Levenson, E., & Bennett, D. (2014, April). Is high-frequency trading as bad as Michael Lewis wants you to think? *The Wire: News from the Atlantic*. Retrieved from http://www.thewire.com/business/2014/04/is-high-frequency-trading-as-bad-as-michael-lewis-wants-you-to-think/359903/

Lohr, S. (2012, February 11). The age of big data. *New York Times*. Retrieved from http://www.nytimes.com/2012/02/12/sunday-review/big-datas-impact-in-the-world.html?_r=0

Lyrix, J. (Producer). (2012, August 8). *Jae VERIFIED on Twitter* [Video file]. Retrieved from https://www.youtube.com/watch?v=bk0VKXRi1EM

Manzerolle, V., & Kjosen, A. (2014). Dare et capare: Virtuous mesh and a targeting diagram. In P. D. Miller & S. Matvyenko (Eds.), *The imaginary app* (pp. 143–162). Boston, MA: MIT Press.

Marcuse, H. (1991). *One-dimensional man: Studies in the ideology of advanced industrial society*. Boston, MA: Beacon Press.

Masinde, J. (2016, August). Mobile money giant M-PESA is getting its own debit card to compete with banks. *Quartz Africa*. Retrieved from http://qz.com/734842/mobile-money-giant-m-pesa-is-getting-its-own-debit-card-to-compete-with-banks/

O'Dwyer, R. (2015). Money talks: The enclosure of mobile payments. In G. Lovink, N. Tkacz, & P. DeVTies (Eds.), *The MoneyLab reader: An intervention in digital economy* (pp. 230–243). Amsterdam, The Netherlands: Institute of Network Cultures.

Pike, A., & Pollard, J. (2010). Economic geographies of financialization. *Economic Geography*, *86*(1), 29–51. doi:10.1111/j.1944-8287.2009.01057.x

Rao, L. (2009, June). Facing a lawsuit and complaints from celebs, Twitter launches verified accounts. *Techcrunch*. Retrieved from https://techcrunch.com/2009/06/06/facing-lawsuits-and-complaints-from-celebs-twitter-launches-verified-accounts/

Rug, F. (Producer). (2015, October 23). *I GOT VERIFIED!!* [Video file]. Retrieved from https://www.youtube.com/watch?v=eGgVVVEux4I

Santora, M. (Producer). (2014, September 4). *I'm officially TWITTER VERIFIED* [Video file]. Retrieved from https://www.youtube.com/watch?v=SQ6u5P-g-jM

Schwabel, D. (2011, February). The reputation economy is coming—Are you prepared? *Forbes*. Retrieved from http://www.forbes.com/sites/danschawbel/2011/02/28/the-reputation-economy/#6813f6d840dc

Senft, T. (2013). Microcelebrity and the branded self. In J. Hartley, J. Burgess, & A. Bruns (Eds.), *A companion to new media dynamics* (pp. 346–354). Malden, MA: Wiley and Sons.

Shahani, A. (2016, March). After terrorist attack, a phone company is beating Google at big data. *NPR All Tech Considered*. Retrieved from http://www.npr.org/sections/alltechconsidered/2016/03/01/468574508/how-a-mobile-carrier-in-asia-is-beating-google-at-the-data-game

Smith, D. L. (2009, October). Twitter's business model: Brilliant or non-existent? *Harvard Business Review*. Retrieved from https://hbr.org/2009/10/twitters-business-model-brilli

Smythe, D. W. (1977). Communications: Blindspot of western Marxism. *Canadian Journal of Political and Social Theory*, *1*(3), 1–27.
Steinberg, J. (2013, Sept. 13). Your new iPhone can put your identity at risk. *Forbes*. Retrieved from http://www.forbes.com/sites/josephsteinberg/2013/09/13/your-new-iphone-can-put-your-identity-at-risk/#552bfdf648bd
Sundararajan, A. (2015, July 26). The 'gig economy' is coming: What will it mean for work? *The Guardian*. Retrieved from https://www.theguardian.com/commentisfree/2015/jul/26/will-we-get-by-gig-economy
Sussman, W. (1984). *Culture as history: The transformation of American society in the 20th century*. New York, NY: Pantheon.
Terranova, T. (2013). Red stack attack! Algorithms, capital and the automation of the common. *EuroNomade*. Retrieved from http://www.euronomade.info/?p=2268
Tsukayama, H. (2016, July 20). Twitter opens up verified accounts to everyone; here's how to get yours. *Chicago Tribune*. Retrieved from http://www.chicagotribune.com/bluesky/technology/ct-twitter-verified-account-wp-bsi-20160720-story.html
Turow, J. (2011). *The daily you: How the new advertising industry is defining your identity and your worth*. New Haven, CT: Yale University Press.
Twitter. (2016). *About verified accounts*. Retrieved from https://support.twitter.com/articles/119135
Van Dijck, J. (2011). Tracing Twitter: The rise of a microblogging platform. *International Journal of Media and Cultural Politics*, *7*(3), 333–348. doi:10.1386/macp.7.3.333_1
Verify. (2002). *Shorter Oxford English dictionary* (5th ed., p. 3522). New York, NY: Oxford University Press.
Vlogs, R. (Producer). (2016, April 15). *Verified on twitter!* [Video file]. Retrieved from https://www.youtube.com/watch?v=oBIZ9BBL07g
Weber, M. (1949). Objectivity in social science and social policy. In E. A. Shils & H. A. Finch (Eds. and Trans.), *The methodology of the social sciences* (pp. 50–112). New York, NY: Free Press.
Weber, M. (2003). *The Protestant ethic and the spirit of capitalism*. Mineola, NY: Dover.
Wernick, A. (1991). *Promotional culture: Advertising, ideology and symbolic expression*. London, UK: Sage.
World Bank. (2016). *Identification for development: Strategic framework*. Retrieved from http://pubdocs.worldbank.org/en/179901454620206363/Jan-2016-ID4D-Strategic-Roadmap.pdf