Autonomy, Economy, and Colony: Practicing Human Identity in a State of Algorithmic Transition

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Mediation of the Self

How and to what extent are algorithms' assessment and mediation of human activity creating new conceptions of the "self"? Is this transformation of self a unique historical event as the use of algorithms for mediating new forms of social systems and decision-making become increasingly prevalent? Burrell and Fourcade, in a review of institutional effects, summarize that algorithmic management of social interactions is "transforming the way people interact, associate, and think" and doing so in entirely new ways.[1] Similarly, Rogers Brubaker, in *Digital Hyperconnectivity and the Self,* asserts that algorithms' impact on the self is "the defining fact of our time."[2]

Kroeber and Kluckholm, in their classic definition of the self, define it "as reflexive, and socially constructed – a person's perceptions of who they are in relation to others and their social system/culture." Brubaker adds that the self is "…a thoroughly social phenomenon, formed and sustained in and through ongoing social interaction and performative enactment."[3] To put it simply, our self is what emerges from our enmeshment with society.

This article will explore how our self is being remade by a new kind of society that relies on increasingly autonomous algorithms to mediate our social interactions. To gain insight into this new kind of society that would, by definition, create a new kind of "us," we will review the scholarly literature investigating algorithms' impact—personally, relationally, and societally—and the emergence of new forms of resistance for maintaining the human practice of self-conceptualization.

The authors generally agree that algorithmically mediated human interactions have significantly affected the self. In each case, they observe disorientation in the workplace, among social platforms (both physical and virtual), and within a society based on an economy of human data transactions. Although each author considers these effects through different lenses, they are well-aligned in seeing them taking place within a social structure in constant "modulation,"[4] per Gilles Deleuze. It is as if we are interacting within a continually shifting society of societies whose complexity requires a new form of mediation capable of paralleling this ongoing change.

Nowhere is this societal modulation felt more than within our practice of forming the self. As algorithms increasingly engage in our activity for its rich store of behavioral data among our interactions within our economy, state, and other communities of interest, they must effectively take on society's role in our self-formation. As they do, they create a cycle of an increasing need for data based on

human activity that bends toward the efficiencies of algorithmic *processing* of the self, winning over the less efficient, yet more organic, collective *practice* of developing the self. It is as if a meandering, societal river is being controlled and converted into an algorithmically mediated canal. It carries us more efficiently toward definitions of self while obviating the need for us to explore the more complex coastlines along the way autonomously.

As algorithms advance in their ability to organize the journey of self-development and learn from their myriad assessments of human behavior through canal-like processing as social mediators, their impact on autonomy and decision-making is becoming significant. Beyond influencing our everyday interactions, algorithms are now being introduced into a qualitatively different relationship with us as they ironically begin to take over our roles in influencing others.

Automating Autonomy

As is well known, job functions have been increasingly digitally automated as physical and virtual-world process management systems take over task-oriented roles of increasing complexity. To date, the higher-level creative, more strategic, less process-driven functions in our work have remained protected from the advance of digital management systems. Only recently have algorithms begun encroaching on positions requiring the level of thinking referenced by Łukasz Młyńczyk as "system 2" (S2) (thinking "slow" as developed by Daniel Kahneman)[5]. The characteristics of S2

thinking include deliberate, conscious effort through logical/skeptical reasoning toward a form of strategic or higher-level decision-making that sets the basis for effective "System 1"(S1) "fast" thinking where making critical decisions in the moment is of increasing importance. It is a set of characteristics that practically define the role of news media editors who set the agenda for what we perceive as the reporting most critical for our understanding of the world. In a study of autonomy at this higher level of thinking, Cools, Gorp, and Opgenhaffen interviewed editors at major news outlets whose decision-making autonomy was being disrupted by algorithmic news recommenders (ANR).[6] The subjects included editorial staff across well-respected, authoritative new outlets, such as *The Washington Post*, *The Wall Street Journal*, *Der Spiegel*, and the BBC, increasingly using ANR. Given Cools's focus on S2-level thinking, it is essential to note that the use of ANR, in this case, was to act as a gatekeeper for the news agenda and recommendations for how best to cover it rather than the now-ubiquitous, seemingly list-based use of simpler algorithms in tracking trends and making recommendations to subscribers.

A "Trust-Distrust" Relationship

Through interviews with the staff, Cools established that the news editors' sense of journalistic autonomy was, in fact, their "core value" for making the critical decisions on what was essentially the "news."[7] The high value that editors placed on autonomy was, as Cools perceived, a significant factor in developing a

"trust-distrust" relationship with ANR in the newsroom. Trust was driven by confidence among the editors that ANR would be incapable of taking over the subtle decision-making required of their jobs. However, they also reserved a significant amount of their distrust for ANR as they considered the potential of ceding it journalistic control over what is "newsworthy."

The editors who leaned toward higher levels of trust in the algorithms believed that ANR autonomy could be managed by constraining it to the role of decision-support. "The final judgment needs to be made by a journalist," was the general perception across all editors.[8] Those who were more skeptical and leaning toward distrust in the model predicted an inevitable eroding of those constraints surrounding ANR and, therefore, a loss of their "journalistic autonomy [and] editorial control."[9]

Regardless of the editors' levels of trust, Cools, after interviewing others across the newsroom—especially those in the newsrooms' "innovation labs"[10] who are responsible for implementing ANR—has concluded that the editor's role and their identity as autonomous gatekeepers and agenda-setters for the news will change as their relationship with ANR inevitably continues to develop.[11] In the short term, the loss of decision-making autonomy will carry the most pronounced effects. In the long term, Cools predicts a more fundamental "change in the core journalistic

roles"[12] of news gatekeeping and agenda-setting across all news outlets as ANR spreads.

Given the social significance of the shift in agenda-setting responsibility, Cools recommends more in-depth research into one of the newsrooms to better uncover the underlying dynamic of a new form of relationship at the level of strategic thinking not yet encroached upon by automation until very recently. Specifically, he recommends a combination of ethnographic research and further expert interviews to focus on changes in newsroom culture and its social implications as the role of deciding the news becomes redefined. In this respect, political scientist Loise Amoor, in *Cloud Ethics*, considers this shift of autonomy to algorithms to be at the core of how power will manifest. As she asserts, what is "at most stake politically and ethically is the degree of autonomy afforded to machines versus humans as a locus of decision."[13]

Transacting Relationships

In another form of algorithmic effects on the autonomy of relationships (in this case, their active engagement in mediating our everyday relationships), the algorithm is out of view as an objective minder of behaviors on social platforms. It is in our everyday relationship behavior where algorithms congregate for prime data collection and why the current place for that congregation is on today's social media platforms. However, as these platforms further expand into the physical world, their

effects become increasingly ubiquitous. (The most straightforward route is through our existing everyday transactions, online and off.) In return, the platforms appear to serve us with increasingly refined experiences that generate an increasingly refined set of behavioral data to categorize and sell (without, in some cases, even the need for ads).

Through historical narrative and in-depth interviews with social media developers, managers, (and critics) of growing digital social systems, Fourcade and Kluttz observe human relationship-building, and the self, along with it, are converted into behavioral transactions to serve a "culture of digital capitalism."[14] They base their study on Marcel Mauss's ideal of "gift-giving" as "a form of alliance-making or enrollment" in the practice of relationship-building between individuals.[15] Gift-giving, as a metaphor for relationship-building, is a cultural performative that obscures the economics of the transaction amid a ritual "ceremony" of developing relationships among selves that Bourdieu would call an "interest in disinterestedness" [16]. Simply put, exchanging gifts, particularly between those of equal status, is primarily based on an interest in building relationships, not the gifts themselves. In the context of a social media platform, a gift exchange among users can come in the form of likes, shares, and follows.

Fourcade and Kluttz observe this culturally embedded gift-giving model being manipulated by social media platforms – in this case, where the apparent gift of

a "free" platform is reciprocated by the users, whether consciously or not, simply through their activity, whatever that may be; whether or not they click on an ad. Per Fourcade and Kluttz, it is an insidious model created in the "cultural imagination of digital capitalists,"[17] designed to transform relationship-building into behavioral data sought for categorization to be sold at a profit.

Although ad-clicking generates revenue, it is critical to note that the platform's primary interest is in the sale of categories of behavior, not the individual per se. These categories, which cut across many individuals, are then sold to outside marketers who gain valuable market intelligence that helps target offers to behavioral categories. Meanwhile, relationships between users are algorithmically motivated toward the transactional through nudges and cues to invite further engagement as "each online click reveals some tendency"[18] that can be sold in the form of data. Fourcade and Klutz identify this underlying transacting as a "performance of the self"[19] and the platform, increasingly extending both physically and virtually, as their workplace stage. In this way, the user becomes the "hidden worker," referenced by Susan Leigh Star, who is kept from view by the "images of the…Silicon Valley superstar…in the network…screening out the work that is delegated."[20]

Proving Star's point, Facebook (now Meta) CEO Mark Zuckerberg in 2012 asserted that simply building an app for user-led sharing "may be good for the world, but it's not good for us. Ultimately, I think the purpose of the platform is to increase

sharing back into Facebook."[21] Coincidentally, 2012 was also the year Facebook went public, started presenting advertisements in its news feeds, and launched Facebook Exchange, where advertisers can "bid on" and "buy users" in their and Meta's terms based on activity profiles in this real-time system.

Per Fourcade and Kluttz, a political-economic model is emerging out of these bid-and-buy transactions that will require the self to go through a "transformation into disembodied data streams"[22] so that the platform can maintain increasing commodity flows of behavioral data. Fourcade concludes with a warning. As this economic model is allowed to normalize, people will consider their selves—consciously or unconsciously— as "valuable data repositories to be sold" to fulfill their political, economic, and societal obligations. The result is a new self that must perform behaviors to generate data merely to "*be*." As Łukasz Młyńczyk states in "Creating a Collective Identity in the Digital Age," "If you're not paying for the product, then you are the product."[23]

Post-Neoliberalism and Self-Colonization

According to Brubaker, an emerging "digital hyperconnectivity"—that is, everyone and everything connected to each other—has recast society into a uniquely integrated "sociotechnical" system. This intermediation into "every aspect of every human's experience"[24] has resulted in a new concept of self that bends toward an incentivized, next-generation self-entrepreneurs who not only brand themselves but

"produce" new versions of it. Borrowing from Michel Foucault, Brubaker refers to this as the "entrepreneur of one's self."[25] The overarching theme, extending from Fourcade and Kluttz, is the development of one's self in the form of data to be sold and then repurchased in a more finished (*value-added*) state of reconstructed data (i.e., content). In this way, the self completes its transition into an "*object of consumption.*"[26] Thus, once full access to behavioral data is made, autonomous choice is no longer required.

Each of the studies referenced in this article, including Brubaker's, describe in their findings a significant shift from the autonomous self as we become further engaged in exchanging our behavior for access—whether for loans, salary, education, or any aspect of society via expanding social platforms. Prior to this society of control, as Deleuze points out in reference to Foucault,[27] our sense of autonomy was uniquely created in a culture of institutional enclosures in relationships among people recognized by the state and in its social structure as individuals. Now, in our modulating communities of enmeshed and interconnected commercial and public institutions—all containing various moments and aspects of the self through hyperconnectivity—the individual, per Deleuze, becomes the "dividual"[28] made of many separated parts of the self—i.e., categories—able to be seen and mediated among an increasingly porous set of institutional relationships simultaneously.

As algorithms further perform the hyper-complex functions of society across these institutions, according to Brubaker, their core economics—extending Fourcade and Kluttz's social media example—not only engage the processing of self but do so from entirely outside the human framework. He views this step as the final stage of our neoliberal societal requirement to be a "responsible chooser," as presented and developed through the current ideal of the self-entrepreneur, the "influencer."[29] They are the paradigmatic model of the virtual self-producer of many selves and the archetype for the responsible chooser and the "conscious user."

However, choice becomes unnecessary as algorithms fulfill our needs based on vast data in unlimited forms, and we consciously and actively engage them in doing so, given the tools at our disposal. Brubaker concludes that the neoliberal version of self-reliability and responsibility will be discarded as artificially intelligent variations of "autonomous search," marketed as "proactive personalization" and "convenience, not friction," assist us in fulfilling the self. (The final canal.) When choice becomes less critical, Brubaker – like Fourcade and Kluttz – predicts a final shift from the idea of neoliberal self-entrepreneur and entrepreneur of the self, incentivized to gain access to more choice, into the *post-neoliberal* colonizer-of-the-self, who is incentivized to extract their data for access that, in turn, makes choice unnecessary. Thus, their data becomes a means of payment for finally moving from freedom *of* choice to being given freedom *from* choice.

Resistance

Institutional remedies to begin addressing the magnitude of societal change Brubaker covers have primarily centered on transparency in the use of data, online tracking, access to personal information, and, most recently, the operation of the algorithms. The newly introduced EU Digital Services Act[30] puts in place "transparency measures for online platforms on a variety of issues, including on the algorithms used for recommending content or products to users."

Yet all the authors who mention it find transparency problematic for several reasons. First is the political tendency to publicly target the usual corporate culprits versus addressing the fundamental change that algorithms represent. Zuboff refers to this political performative as a societal "taming" regimen that paradoxically creates an ever-increasing level of social surveillance.[31] Nobel calls out the "ideologies of transparency that privilege a kind of fact-based, information-oriented gathering of evidence"[32] that only further marginalizes people of color who do not have access to these resources and are most affected by algorithmic profiling.

Amoore rethinks transparency by arguing that it is in algorithms' opacity – not transparency – where we see the accurate outline of its role as a political mediator across humans and nonhumans. From descriptions given throughout Amoore's interviews with coders and designers, the algorithm, in its simplest form, is a functional "cloud" of decision-making that assess a "scene" of behaviors for "salient

features." These scenes contain predetermined (by human or algorithm) "things of interest"[33] providing an increasingly data-rich opportunity for economic and political interests to create their own reduced and condensed narratives of identity – e.g., "woman carrying supplies," "truck in a military convoy," or, for that matter, the need for "algorithmic transparency."[34] It is in these reduced narratives, or "fabulations" per Amoore, where power lies, not through "more insight" into the workings of the algorithm (where even the designers concede they "don't know how they work" once its human-set weightings are in motion). Instead, she proposes a "cloud ethic" for framing new fabulations that disrupt the current algorithmic narrative of humans to be transacted. With minor adjustments to the algorithmic political weighting of a scene narrative, "woman throwing frisbee" becomes "*A woman is holding a child at the border fence,"* and "truck in a military convoy" becomes *"school bus leaving the center of Kandahar."* [35] In each case, transparency is disrupted and transformed into *creating a metaphor out of opacity.*

Power, per Star, lies with those who create the metaphors that "bring worlds together."[36] While the centers of economic and political power distract with debates on outdated metaphors of transparency in a world of disintegrating borders, Amoore disrupts it with the metaphor of a cloud ethic thriving in the opacity that the powerful use as cover for entering and controlling a borderless world. Here, in all its opacity, is

where, according to Deleuze, the "rough outline" of new forms of resistance will emerge.[37] A cloud ethic would seem to fit that rough outline perfectly.

Participative Circumvention

In "Let's Be Disinterested Together," a group of Reed College graduate and undergraduate students working along that outline collectively designed, created, and presented a living model of a (pre-)divided self as a user on an algorithmically-controlled platform—in this case, Instagram.

In an experiment of Bourdieu's concept of interest in disinterestedness, we built a persona immersed in an opaqueness that the Instagram algorithms found acceptable. Through the creation of "Art Smith," seven of us became one divided individual (Deleuze's "dividual") in a collective profile.[38] The intent was both performative: create and portray a pre-divided self through seven individuals anticipating data extraction and inquisitive: how would the algorithm respond to our interest in the collective engagement of its platform combined with our disinterest in engaging its transaction model? The expectation was that Art would be allowed to participate given that, as an individual, opaque persona across seven dividuals, Art conceptually already fits the data-sliced and categorized user model as recognized by their algorithms.

The experience of "being" Art and the results of that experience can be considered an early prototype for potential acts of resistance through what I am

calling *participative circumvention*—a way of engaging the self in the sociotechnical world without becoming enmeshed in its economy of transactional relationships. Per Amoore, "a cloud ethics must be able to locate [through opacity] ways of being together that resist the algorithmic forces of attribution."[39]

To navigate these ways of being together, we determined upfront that we would individually post each day through the week across seven individuals as "a collection of minds…nudging one another into slight deviations."[40] We hypothesized that by doing so, the algorithms would recognize Art as a valid dividual profile of behavioral categories to be assessed while not recognizing Art as a set of seven individuals to be profiled. Thus, Instagram's dividual-oriented platform was repurposed toward the development of selves (something Zuckerberg would find "not good") among seven people sharing and applying their academic interests through collective expression. In this way, we expanded the model for group affinity into the opacity of Art's algorithms relationships.

Over our project timeline, Instagram's algorithms went to work on deciphering, determining, and recommending offers to Art. For example, early on, the topics suggested for Art included the usual attempts to get to "know" them: Poetry, Music, Performing Arts, Pants & Shorts, America's Got Talent, and Drinking Water; followed up with Dresses and Fashion, SUVs, and Clairvoyance. One curious example, especially for a collective of Reed students, was a set of political

recommended "follows" for Ben Shapiro, Ivanka Trump, and "Conservativism in the United States." However, most interesting was the algorithms' valiant attempt at assessing Art's gender. Likely based on Art's profile name, they began with recommendations for male-gendered clothing, followed by female-gendered offerings, and inevitably settled with neutral-gendered offers. Based on Instagram's business model, more critical than Art's purchase of clothing was testing for Art's gender—one of, if not the most important categories to be sold bundled with the rest.

Regardless of their intention, it is worth considering how algorithms, coded to engage individuals, would be challenged by engaging Art. Not simply because Art is an opaque collective of individuals creating a dividual, but because Art has already completed the algorithms' work for them. Algorithms are designed to categorize dividuals for transaction, yet Art came pre-divided into seven individuals incapable of being divided as a dividual. Thus, Art-as-collective, ironically in collusion with the algorithms of Instagram, was the opaque stand-in for allowing new types of relationships. In this case, based on individuals' ability to form their selves in ways that redefine the platform into how it is presented—a free space for building relationships based on a new metaphor of opacity that is inherently incapable of allowing market efficiencies for assessing and transacting behavior. Owning this metaphor will help determine what the next social structure—and its economy—will become.

As commented upon by the authors, the development of the Art-algorithm relationship was a unique situation of seven individuals engaged in a course project over three weeks: not a sustained test of a subversive long-term engagement with Instagram. Given that, Art acts as an early prototype for considering alternative forms of resistance within a modulating society that is less about eliminating or exposing algorithms and more about creating an autonomous relationship with them by engaging the potential of opacity. Whatever form resistance takes, I trust that participative circumvention will be a valuable frame for locating "new ways of knowing the self" [41] in an era of digital hyper-connectivity. Per Cheney-Lippold, "We can mess with the algorithmic assessment, but only if we mess with it on its terms—and we do it together." [42]

Conclusion and Further Study

Although not all authors shared specific examples of collective action, all pointed to its necessity. Based on these studies, as socio-technological change accelerates, it will be necessary to form human-nonhuman relationships where the strength of the identities of society and self are non-negotiable in the realm of algorithmic mediation. Here, collective action will be required, given that transparency ironically obfuscates the algorithm while exposing the individual. I propose studying collaborative structures, methods, and strategies for navigating algorithmically mediated spaces to understand how these communities emerge. Considering efficacy,

the study would be carried out from the perspective of a collective's potential for creating parallel communities based on new metaphors for navigating a very different type of society.

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[2] Brubaker, "Digital Hyperconnectivity and the Self," 771.

[3] Markus and Kitayama, "Culture and the Self: Implications for Cognition, Emotion, and Motivation," 225; Brubaker, "Digital Hyperconnectivity and the Self," 774.

[4] Deleuze, "Postscript on the Societies of Control," 4.

[5] Młyńczyk, "Creating a Collective Identity in the Digital Age: The Perspective of Behavioural Economics," 85.

[6] Cools, Gorp, and Opgenhaffen, "When Algorithms Recommend What's New(s): New Dynamics of Decision-Making and Autonomy in Newsgathering," 198.

[7] Cools, Gorp, and Opgenhaffen, 198.

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[12] Cools, Gorp, and Opgenhaffen, 199.

[13] Amoore, *Cloud Ethics*, 71.

[14] Fourcade and Kluttz, "A Maussian Bargain: Accumulation by Gift in the Digital Economy," 2.

[15] Fourcade and Kluttz, 2.

[16] Bourdieu, "The Field of Cultural Production, or: The Economic World Reversed," 311.

[17] Fourcade and Kluttz, "A Maussian Bargain: Accumulation by Gift in the Digital Economy," 2.

[18] Burrell and Fourcade, "The Society of Algorithms," 227.

[19] Fourcade and Kluttz, "A Maussian Bargain: Accumulation by Gift in the Digital Economy," 5.

[20] Star, "Power, Technologies and the Phenomenology of Conventions: On Being Allergic to Onions," 29.

[21] Wong, "'Good for the World'? Facebook Emails Reveal What Really Drives the Site."

[22] Burrell and Fourcade, "The Society of Algorithms," 231.

[23] Młyńczyk, "Creating a Collective Identity in the Digital Age: The Perspective of Behavioural Economics," 96.

[24] Zuboff, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power, 19.

[25] Brubaker, "Digital Hyperconnectivity and the Self," 785.

[26] Brubaker, 786.

[27] Deleuze, "Postscript on the Societies of Control," 4.

[28] Bourdieu, "The Field of Cultural Production, or: The Economic World Reversed," 5.

[29] Brubaker, "Digital Hyperconnectivity and the Self," 786.

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[31] Zuboff, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power, 514.

[32] Noble, Algorithms of Oppression, 131.

[33] Amoore, *Cloud Ethics*, 122.

[34] Amoore, 27.

[35] Amoore, 158.

[36] Star, "Power, Technologies and the Phenomenology of Conventions: On Being Allergic to Onions," 52.

[37] Deleuze, "Postscript on the Societies of Control," 7.

[38] Ben Read et al., "Let's Be Disinterested Together," 5.

[39] Amoore, Cloud Ethics, 169.

[40] Ben Read et al., "Let's Be Disinterested Together," 10.

[41] Brubaker, "Digital Hyperconnectivity and the Self," 796.

[42] Cheney-Lippold, We Are Data: Algorithms and the Making of Our Digital Selves, 199.