

“Gaming the System”: Platform Paternalism and the Politics of Algorithmic Visibility

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Social Media + Society
October–December 2019: 1–12
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DOI: 10.1177/2056305119879995
journals.sagepub.com/home/sms


Abstract

As the logic of data-driven metrification reconfigures various realms of social and economic life, cultural workers—from journalists and musicians to photographers and social media content creators—are pursuing online visibility in earnest. Despite workers’ patterned deployment of search engine optimization, reciprocal linking, and automated engagement-boosting, tech companies routinely denigrate such practices as *gaming the system*. This article critically probes discourses and practices of so-called system-gaming by analyzing three key moments when platforms accused cultural producers of algorithmic manipulation. Empirically, we draw upon textual analyses of news articles ($n = 105$) and user guidelines published by Google, Facebook, and Instagram. Our findings suggest that the line between what platforms deem illegitimate algorithmic manipulation and legitimate strategy is nebulous and largely reflective of their material interests. However, the language used to invoke this distinction is strongly normative, condemning “system gamers” as morally bankrupt, while casting platform companies as neutral actors working to uphold the ideals of authenticity and integrity. We term this dynamic “platform paternalism” and conclude that gaming accusations constitute an important mechanism through which platforms legitimate their power and authority, to the detriment of less well-established cultural producers.

Keywords

cultural production, platforms, algorithms, system-gaming, visibility

Introduction

As the logic of data-driven metrification reconfigures various realms of social and economic life, cultural workers—from journalists and musicians to photographers and social media content creators—are pursuing online visibility in earnest. Cultural producers’ particular visibility-enhancement strategies vary: journalists utilize “search-friendly” keywords and titles (Dick, 2011; Usher, 2010), digital advertising specialists rely upon search engine optimization (SEO) to bolster their clients’ web presence (Ziewitz, 2019), photographers orient their compositions to “calculations” of the Flickr algorithm (Gillespie, 2014), creative entrepreneurs devote time and energy to understanding how algorithms structure their online shops (Klawitter & Hargittai, 2018), and digital content creators are evermore attuned to the impact of rating and recommendation systems in ordering their social media feeds (Bishop, 2018, this issue; Cotter, 2019; O’Meara, this issue). Taken as a whole, these accounts testify to a much-vaunted ideal of *being seen* in digital contexts, wherein “algorithms establish the conditions through which visibility is constructed online” (Bucher, 2012, p. 82). Creators also endeavor

to produce content that buffers against potential invisibility: this is especially challenging given the opacity of platforms’ systems of moderation, wherein content may be removed, demoted, or rendered “non-recommendable” without users’ knowledge and/or consent (Gillespie, 2018; Myers West, 2018).

Despite the ubiquity of visibility-enhancement practices among communities of content creators, key stakeholders from technology platforms like Google, Facebook, Instagram, and YouTube routinely denigrate these activities as *system-gaming* or *manipulation*. This article explores how accusations of “gaming the algorithm” and wider narratives of manipulation constitute a critical, but largely overlooked, mechanism through which platforms cultivate, demonstrate,

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and legitimate their power—intensifying inequalities between different classes of cultural workers in the process. In doing so, we contribute to a growing body of literature that explores how technology platforms shape the contours of the public sphere in ways that are significant, yet often hidden and thus unaccountable. Indeed, a few exceptions notwithstanding (e.g., Cotter, 2019; Gillespie, 2017; Ziewitz, 2019), existing scholarly and popular discourses deploy the concept of “gaming the algorithm” as an apolitical and relatively fixed category whereby “gaming” straightforwardly applies to specific online practices.

Our perspective, by contrast, draws attention to the power dynamics underpinning accusations of algorithmic manipulation—as well as the reactive punishments or “crackdowns” that these practices so often elicit. It is important to acknowledge at the outset that we make no attempt to distinguish between algorithmic management and manipulation, nor do we offer a framework for assessing whether specific user practices constitute “gaming.” Instead, we draw on a qualitative content analysis of media coverage as well as the platforms’ public communications to analyze how tech companies discursively frame these practices, how these characterizations are taken up in broader cultural discourses, and what consequences they portend for contemporary cultural production.

Our analysis indicates that the boundary between what platforms deem legitimate strategic action and illegitimate algorithmic manipulation is nebulous and continually shifting in accordance with platforms’ business strategies. Yet, we find that both platforms and the press describe the distinction in strongly normative terms, portraying accused system-gamers as morally deviant and dishonest. This moral boundary-drawing fosters a dynamic we call *platform paternalism*, in which platforms unilaterally issue rules, pronouncements, and punishments that purport to be in the best interest of their user networks. This orientation not only imbues platforms with structural and economic power, but moral authority as well.

The paternalistic language that characterizes accusations of system-gaming has two key implications for contemporary cultural production. First, it obscures the ways in which platforms’ content policies are driven by economic self-interest—particularly their ongoing efforts to prompt creators to pay for advertising to gain increased visibility, rather than seeking to achieve it through free use of the platform. Instead, system-gaming discourse misleadingly casts platforms as disinterested actors who punish certain cultural workers as part of a good-faith effort to create a content meritocracy, in which the highest-quality content inevitably rises to the top. Second, the language of system-gaming exacerbates inequalities between cultural workers. While platforms have accused a range of cultural workers of gaming the algorithm, independent producers are less able than their larger and better-resourced counterparts to defend against such accusations and recover their visibility in response to punishments meted out by platforms. They are often ill-equipped to

pay for platform advertising, potentially making them more likely to be accused of algorithm-gaming as they pursue online visibility through alternative, unpaid means.

By uncovering the ways in which technology platforms have defined and operationalized the concept of algorithmic manipulation—that is, *gaming the system*—within communities of cultural production, this article advances understandings of how platforms establish, maintain, and legitimize their institutional power. In addition, we show that platform policies around system-gaming stand to further disadvantage resource-poor cultural producers in a field that already lends itself to winner-take-all dynamics (Nieborg & Poell, 2018).

Algorithms in Cultural Production

In recent years, the news, information, and entertainment industries have experienced profound upheaval as platform logics reconfigure both the processes and products of cultural production. While the impacts on the creation and distribution of media content are kaleidoscopic, Napoli (2014) convincingly argues that the so-called “algorithmic turn” is among “the most visible and potentially significant transformations currently affecting media industries” (p. 34). Media producers, he explains, have become increasingly reliant on algorithmically driven systems to predict demand—using data to forecast potential successes amid a hyper-saturated and erratic content marketplace—as well as to automate the content creation process (Napoli, 2014). Such heavy reliance on data testifies to a wider metrification of social and economic life, powered by the currency of reputation, attention, and status (e.g., Gandini, 2016; Hearn, 2010; Marwick, 2013).

To be sure, media workers have long utilized systems of measurement to help contain the vagaries of unpredictable markets for cultural products. With the fragmentation of media beginning in the 1970s and 1980s, media executives in the United States sought to break down audiences into measurable segments; market research firms’ then-new computing technologies were hailed for their “awesome capacity to gather [audience] data” (Turow, 1997, p. 44). By the 1990s, as Ang (1991/2006) notes, “audience measurement ha[d] become a technologically advanced practice in which enormous amounts of money and energy [were] invested” (p. 3). The more recent ascent of digital, on-demand data has provided instantaneous forms of audience feedback which promise—superficially, at least—more granular information about a media product’s potential success or failure within a market.

Notions of success and failure align with the digital media economy’s ideal of *being seen*, wherein a marker of “successful” content is being “algorithmically recognizable” or “algorithmically visible” (Bishop, 2018; Bucher, 2012; 2018; Gillespie, 2014). For cultural producers—compared with “ordinary” social media users—the imperative to be visible is a professional mandate, hitched to financial success as

well as professional autonomy (Duffy & Hund, 2019; Klawitter & Hargittai, 2018). As Carlson (2018) contends of the rise of computational journalism, the impact of algorithmic decision-making on news workers goes beyond merely ordering and ranking certain features to reconfigure the very codes of editorial judgment (see also, Anderson, 2013; Dick, 2011; Petre, 2018). Similarly, magazine producers beholden to emergent production norms of search and content syndication adapt their production routines in ways that seem to infringe on the creative process (Duffy, 2013, p. 81).

More recently, with the widespread uptake of social networking sites, media workers—including independent content creators—must anticipate and accommodate the ever-changing algorithmic systems of platforms like Facebook, Twitter, Instagram, and Pinterest (Bishop, 2018; Cotter, 2019; Klawitter & Hargittai, 2018; O’Meara, this issue). As Bishop (2018) and others make clear, content creators’ perceptions of how algorithms “work” represent what Bucher (2017) calls “algorithmic imaginaries,” which are based on how users “imagine, perceive and experience algorithms and what these imaginations make possible” (p. 12). Thus, despite the black-boxed nature of algorithmic systems (Pasquale, 2015), users’ understandings of their operations get shared among community members and become part of the collective stock of knowledge. The concept of algorithmic imaginaries is similar to folk theories disseminated among networked communities seeking to collectively discern the causes and impacts of particular algorithmic experiences (DeVito, Gergle, & Birnholtz, 2017; Eslami et al., 2015). Algorithmic folk theories often emerge and take shape at moments of rupture, such as when a service like Facebook, Twitter, or Instagram announces a change in the algorithm (DeVito et al., 2017).

At the same time, folk theories are marshaled by users to help explain instances of algorithmic *invisibility*, such as the belief that one’s content has been demoted or removed as part of content moderation practices—both automated or removed by human laborers (Gillespie, 2018). Myers West (2018, p. 4374) notes the impact of practices of “shadowbanning,” when one’s content is made invisible to other users. Noting the lack of transparency, she adds, “Neither the users, nor the platform, nor this author are well placed to accurately assess why these users’ content was flagged—these assessments can only, at best, serve as interpretations of possible motivations” (Myers West, 2018, see also, Cotter, 2019; Eslami et al., 2015).

Indeed, much recent scholarship focuses on content moderation as a means by which platforms quietly but unmistakably define the bounds of acceptable speech (Gillespie, 2018; Myers West, 2018). Scholars have paid far less attention to the circumstances under which platforms accuse users of gaming the algorithm, the punishments they exact in such cases, and the implications of these incidents for creators—despite the fact that these platform interventions also can have a comparable impact.

From Optimization to Gaming

The uptick in practices designed to ensure that one’s content is visible—or, alternatively, inoculate against the threat of invisibility—attests to the driving logic of algorithmic optimization across fields of cultural production. Beginning in the 1990s, web producers sought out slick ways to get their content onto the results pages of various search engines—a practice known as search-engine optimization (SEO). SEO was a fraught practice from the outset, particularly as content creators worked to “trick their way to the top of results pages,” through the use of furtive tactics like so-called “spamdexing” and “link slutting” (Halavais, 2009/2017; see also Ziewitz, 2019). Today, across a sprawling social media economy, cultural producers draw upon a panoply of platform-specific mechanisms to enhance the visibility of content. YouTubers, for instance, try to “reverse engineer” the algorithm (Bishop, 2018), while Instagrammers “play the visibility game” to challenge the algorithmically curated ordering of content (Cotter, 2019).

While such efforts at visibility enhancement are not entirely distinct from long-standing publicity strategies such as press releases and staged public events (Gillespie, 2017), platforms tend to cast engagement-amplification as efforts to manipulate or “game” the algorithm. Such criticisms invoke wider discourses of “cheating” within the culture industries, wherein what is deemed “acceptable” versus “unacceptable” user activity is situated within ever-evolving cultural practices and power relations (Consalvo, 2009). Indeed, Consalvo’s close analysis of cheating among gamers highlights the constantly shifting boundary between “good” and “bad” gameplay, which is shaped in part by industrial formations—an ostensible “anti-cheating industry” that “serve[s] to (re)construct and reinforce particular ways of seeing cheating and those who cheat” (p. 130).

Consalvo’s (2009) rejection of “cheating” as a straightforward descriptive category has productive continuities with perspectives on algorithmic gaming recently put forth by Gillespie (2017), Cotter (2019), and Ziewitz (2019). In contrast to much of the writing on system-gaming—which casts it as a serviceable, if imperfect, descriptor for a particular category of practice (see, e.g., Espeland & Sauder, 2007)—these writings question what is at stake when denigrating a practice as gaming. As Gillespie (2017) argues,

There is a distinction often made, between coordinated efforts to “game” a search engine (like Googlebombing and SEO tactics) and the “genuine” output of independent web producers and users, demonstrating the value of a site from their linking and clicking behaviors. The distinction is a false one. Most contributions to the web are somewhere in the middle, where people in some way coordinate their efforts in order to help make their content visible to a search engine, out of a “genuine” desire for it to be seen. (p. 67)

Ziewitz (2019) also highlights the patterned ambiguities in the “gaming” trope, which casts certain practices as ethical

and, as such, stands as an “important site of governance and contestation in contemporary algorithmic systems” (p. 4). Building on this, our article calls for wider engagement with accusations of gaming as they give shape to the field of cultural production, with particular attention to its role in the service of particular actors across the media and cultural industries.

Case Studies: Three Accusations of “Gaming”

To analyze the discursive politics of so-called algorithm-gaming, we undertook a comparative analysis of three heuristic case studies (George & Bennett, 2005). Following Luker (2008), we conceptualized our case studies as “data outcroppings”—strategically selected sites or incidents where a social phenomenon of interest is especially likely to be present (p. 103). As such, our inquiry focused on three highly publicized instances in which a major platform—Google, Facebook, and Instagram, respectively—characterized a particular type of content-creator behavior as algorithmic manipulation.

Google Demotes Rap Genius for Engaging in SEO

On Christmas Day 2013, Google demoted the lyrics annotation startup Rap Genius (now called Genius) in its search results for 10 days—a punitive response to the latter’s attempt to inflate its ranking in Google searches. Based on an understanding that Google’s algorithms ranked each site in search results based on how many other sites link to it, Rap Genius launched a “blog affiliate” program that offered to promote bloggers’ posts on the company’s social media channels if bloggers would, in exchange, include links to Rap Genius’s annotated lyrics pages in their posts. After a tech blog post titled “Rap Genius Growth Hack Exposed” (Marbach, 2013) began to circulate, Google manually demoted the startup to the sixth page of results, even on searches for the company’s name. Rap Genius quickly posted a public apology to Google, followed by a lengthier post after the ban was lifted.

Facebook Demotes “Engagement Bait”

On 18 December 2017, Facebook announced the company’s increasing efforts to “[fight] engagement bait,” which the company defined as “spammy posts on Facebook that goad [users] into interacting with likes, shares, comments, and other actions” in an attempt to “take advantage of our news feed algorithm” (Silverman & Huang, 2017). Facebook framed the move as similar to previous efforts to diminish the reach of pages that used “clickbait headlines” or led to “low-quality web experiences.” The announcement explained that the changes would be implemented gradually to allow those who were “inadvertently” using engagement bait to stop (Silverman & Huang, 2017).

Instagram Bans Botting Service Instagress

On 20 April 2017, the bot service Instagress shut down following a “request” from Instagram.¹ For \$10 a month, Instagress identified accounts and photos based on a set of keywords provided by the user and automatically “liked” and commented on them from the user’s account. Instagress billed itself as allowing “up-and-coming” content creators to compete with large companies and celebrities who have “entire social media teams managing their accounts” (Wilson, 2017). In the aftermath of the shutdown, Instagrammers increasingly began to join “pods”—broadly defined as groups of users who agree to reciprocally “like” and comment on each other’s posts, hoping that increased engagement will boost the odds of appearing on Instagram’s highly trafficked “explore” page (Cotter, 2019; Pathak, 2017; O’Meara, this issue).

While all three case studies revolve around accusations of system-gaming, they vary along notable dimensions—namely, the accused parties’ status and resources. Rap Genius was a well-established and heavily funded startup at the time of its punishment by Google; Facebook’s “engagement bait” ban applied universally (though cultural workers were arguably more likely than regular users to engage in the proscribed practices); finally, Instagress specifically targeted emerging and independent cultural producers on Instagram. This variation across cases allowed us to examine how gaming accusations interact with existing material inequalities across categories of cultural workers.

Methods

Because of news media’s role in constructing collective perceptions of reality (Gamson, Croteau, Hoynes, & Sasson, 1992; Tuchman, 1978) along with normative and interpretive frameworks (Gans, 1979), media accounts provide optimal source material for examining platforms’ acquisition and maintenance of symbolic power. In the case of large technology companies, journalists—and particularly the technology press—have been important audiences of and amplifiers for platforms’ messages (Ball, 2018), in turn shaping the public’s perception of these companies’ actions and motivations.

For each case study, we gathered news/technology coverage published immediately before (+1 day) and after (up to 1 year) the public announcement, using a time-specified search on Google’s “news” tab (distinct from the Google News app, which was configured in 2017) and the search terms “Google+Rap Genius,” “Facebook+engagement bait,” and “Instagram+Instagress” and “Instagram+pods.” Using the “relevance” option, we collected the first 35 articles for each case ($n = 105$), omitting duplicates, non-English articles, and those that were irrelevant to the case. While we acknowledge the limitations of using an algorithmically driven search tool to gain a broad-based understanding of trends, a preliminary comparative sampling trial found that Google News displayed a significantly wider pool of articles

and diversity of sources than academic databases (e.g., LexisNexis). Using this service thus provided a more holistic picture of media discourse that included general-interest newspapers, magazines, and websites, as well as technology- and business-focused publications.

To supplement this coverage, we also collected Google, Facebook, and Instagram's official statements about each case, as well as their general content creation guidelines ($n=7$). While the inner workings of tech companies are notoriously opaque (Pasquale, 2015), these documents provided insight into their efforts at corporate self-presentation and user management. We used the qualitative coding program Dedoose to manually code the resulting corpus of documents. Coding and analysis were done inductively, following a grounded theory approach (Glaser & Strauss, 1967). Our coding categories, which were created and refined throughout the process, included the following: discursive boundaries between legitimate and illegitimate practices, metaphoric language, invocations of authenticity, and producers' responses to the platform statements and actions.

Findings

Though the cases differed according to the platforms' leveling of system-gaming accusations and the category of users accused, our qualitative content analysis uncovered notable similarities in how they were discursively framed. In particular, both the press and the platforms tended to construct a moral boundary between user behaviors condemned as gaming and those permitted as legitimate. This boundary often drew upon metaphors that revolved around the ideal of authenticity: accused system-gamers were cast as inauthentic—thus morally deviant—actors, while platform companies were paternalistic figures who maintained the authority to restore integrity to platformized cultural production.

Metaphors of Authenticity

Researchers and online users widely understand “authenticity” to be a central organizing principle of social media, despite—or perhaps because of—the staggeringly uneven deployment of the concept across platforms, communities, and practices (e.g., Banet-Weiser, 2012; Duffy & Hund, 2015; Marwick, 2013; Salisbury & Pooley, 2017). Against this backdrop, our data revealed that platforms drew heavily upon the authenticity ideal in delineating legitimate and illegitimate practices of algorithmic optimization. Platforms routinely celebrated “genuine” content and invoked terms like “authentic” or “real” to connote stories and imagery that defied crass quantification. In a characteristic example, a Facebook statement communicated how the newsfeed privileges “authentic communication”:

The feedback we've gotten tells us that *authentic* stories are the ones that resonate most. That's why we work hard to understand

what type of stories and posts people consider *genuine*—so we can show more of them in News Feed. And we work to understand what kinds of stories people find misleading, sensational and spammy, to make sure people see those less. (Mosseri, 2016, italics added)

Pejorative terms like “misleading” and “spammy” seemed to denigrate content produced merely for a boost in metrics and, moreover, opened up a space for platform companies to engage in industrialized filtering mechanisms. Accordingly, much of Facebook's discussion of “engagement bait” used the discursive framework of *authentic versus spam* to justify their own algorithmic sifting. External communications thus explained how the site will “demote posts that go against one of our key News Feed values — authenticity” (Mosseri, 2016). Coverage of Instagram, meanwhile, invoked authenticity in the context of audiences; specifically, the notion of “real followers” was used to distinguish human-run accounts from automated ones (i.e., bots).

The overarching framework of authenticity provided scaffolding for three metaphors that appeared frequently in media coverage of our cases. Metaphors, as Lakoff and Johnson (1980, p. 4) remind, help us make collective sense of new experiences and social arrangements by comparing them to more familiar domains (see also, Stark & Hoffman, 2019). In the cases we assessed, metaphors not only reinforced the authenticity theme but also emphasized its moral implications: actions characterized as authenticity-defying algorithmic manipulation were cast as contaminated, fraudulent, and even criminal. Such discourses, in turn, legitimized platforms' punitive actions and bolstered their retributive authority.

Organic versus Artificial

In its search engine rankings, Google has long distinguished those results that are sorted and presented by its proprietary algorithm from links presented to the user as paid advertising. While newspapers signaled this categorical distinction with the labels of “editorial” or “advertising,” Google notably eschewed this terminology: the company characterizes non-paid search results not as editorial, but as “organic.” The use of “organic” to describe algorithmically curated results serves two purposes: first, it allows Google to co-opt the cultural associations between “organic” and moral virtue, health, and cleanliness (Shapin, 2006). Second, it reinforces Google's self-presentation as a neutral platform whose algorithm merely measures existing quality assessments to fulfill their self-professed mission to “organize the world's information and make it universally accessible and useful.”

While Google employs the term “organic” to draw a boundary between paid and non-paid search results, our research found that the term's application is significantly wider in scope. Thus, the articles in our sample used “non-organic” to describe search rankings that were obtained by means Google did not consider legitimate. In these cases, the

opposite of “organic” was not paid advertising, but, rather, “inorganic,” “unnatural,” or “artificial.” For instance, when Google notified Rap Genius that the startup was being demoted in search results, the reason provided was “Unnatural links to your site” (Genius, 2014). In a rather tautological fashion, Google defined this as “a pattern of unnatural, artificial, deceptive, or manipulative links pointing to your site” (Genius, 2014).

Other platforms employed similar language when discussing what they consider to be algorithmic manipulation. Facebook’s company blog post announcing its attempts to “fight engagement bait” explained that pages “systematically and repeatedly us[ing] engagement bait to artificially gain reach in News Feed” would see their reach substantially diminished (Facebook, 2017). Instagram’s Community Guidelines, similarly, encouraged users to “help us stay spam-free by not artificially collecting likes, followers, or shares” (Instagram, n.d.).

Many news stories, as well as content creators punished by platforms, echoed this discursive framing unquestioningly. In their public apology, Rap Genius’s founders expressed regret for their “foray into irrelevant, unnatural linking” (Genius, 2014). An essay on the photography blog *Petapixel*, meanwhile, noted that content creators’ widespread use of bots on Instagram cheapened the value of engagement. The author explained that while thousands of likes for a post would be “a monumental feat [for users who were] doing things purely organic,” that number of likes is much less impressive in an era of pervasive bot usage (Wilson, 2017). An article on *Econsultancy*, a site geared toward marketing industry professionals, criticized pods on similar grounds: “pods seem to go against the very reasons brands want to work with influencers in place of traditional advertising—the notion that they are *authentic and naturally influential* on social media” (Gilliland, 2017).

To be sure, there were exceptions: an article in men’s magazine *GQ* (Halls, 2018) poked fun at platforms’ use of vague terms like “natural” and “organic,” while several others questioned the platforms’ motivations to adopt punitive stances toward content creators’ attempts to boost their audiences: “one can wonder if [Instagram] is really trying to get more organic interaction on their platform or only push users to pay for sponsored posts” (Décaillet, 2017). Still, even these more critical stories adopted the “organic” and “inorganic” growth and engagement as actually existing categories.

Just as organic food is broadly understood to involve minimal human intervention in the form of harmful pesticides, “organic” search results and follower growth imply a lack of strategic promotional action on the part of content creators. By contrast, terms like “unnatural,” “artificial,” and “non-organic” suggest there is something highly undesirable—and even potentially toxic—about creators’ strategic efforts to enhance their visibility. The idea that some content “naturally” and “organically” rises to the top of algorithmic feeds also obscures the platforms’ own curatorial role, while

reinforcing a reputation for objectivity and neutrality that has proven highly lucrative for digital intermediaries (Gillespie, 2010; Halavais, 2009/2017).

Crime and Deviance

The content in our sample often characterized creators’ attempts to improve their visibility on platforms as illicit or even criminal. Media reports frequently used terms like “trick” or “scam” to describe practices like SEO or automating comments on Instagram, while labeling those who engaged in such activities “offenders.” An article on Instagram pods published by the technology blog *Digiday* was titled “Podghazi,” evoking (at least in some circles) associations with scandalous malfeasance (Pathak, 2017). The article went on to characterize pods as “comment collusion,” echoing other articles that framed pods as “Instagangs,” or, in the words of one aspiring photographer and former pod member writing in the *Daily Mail*, a British tabloid newspaper, “a little Instagram mafia . . . the ‘most well kept, dirty little secret of us Instagrammers’” (House, 2017).

Other articles linked the usage of botting services like Instagress not only to criminality but also to shameless moral deviance. The photography blog *Petapixel* described Instagress as such:

Imagine a scenario in any other economy where you could pay a pittance (Instagress is \$10 a month) to rapidly generate currency. While you go about your life, enjoying time with your friends, working, sleeping, and so on, a robot is diligently minting cash for you *even though such a robot is against the law. Some individuals in this economy work hard and make an honest living without the help of a robot, while others brazenly break the law and use these robots to their maximum potential.* The result, aside from social injustice, is currency inflation. When likes and comments are so easily acquired with a bot, the worth behind these actions is diminished. (Wilson, 2017, italics added)

If content creators were “offenders” guilty of criminal or morally abhorrent behavior, platform companies were framed as law enforcement, the criminal justice system, or even a vengeful god (“Hell hath no fury like Google scorned,” began an article in *Popsugar*, a lifestyle and pop culture site, about Google’s demotion of Rap Genius, Whitney, 2013). Articles constructed narratives in which platforms “accused” particular users of algorithmic manipulation, followed by “crack-downs” and “punishments,” which usually took the form of limiting the reach of a creator’s content, or, in extreme cases, banning accounts entirely. A story on the Russian government–funded news site *RT* about Facebook’s engagement bait ban noted that page owners who continued to use engagement bait would face the “machine learning tool’s swift hand” (RT, 2017). This metaphor echoes Rap Genius’s public apology to Google, which opened with an admission that the lyrics start-up had “overstepped, and we deserved to get smacked” (Genius, 2014).

These references to corporal punishment highlight the paternalistic element of the platforms' authority in making and enforcing rules around system-gaming, and particularly the powerful archetypal authority figure of the "Strict Father" (Lakoff, 1995). In his analysis of the conservative worldview, Lakoff (1995) notes the salience of the nuclear family as a moral metaphor, particularly a family headed by an authoritative father who is "morally strong, self-disciplined, frugal, temperate, and restrained . . . He insists on his moral authority, commands obedience, and when he doesn't get it, metes out retribution as fairly and justly as he knows how" (p. 10). Platforms' condemning words and punitive actions toward alleged algorithmic manipulators position them similarly. Like Lakoff's Strict Father archetype, paternalistic platforms expect obedience, issue pronouncements that are not subject to negotiation, and reserve the power to punish when subordinates have not met expectations or have flouted authority.

Perhaps unsurprisingly, then, several articles described a norm of secrecy that had developed among networks of content creators. At the end of Rap Genius's apology post, the company's founders accused its rival lyrics sites of engaging in similar—or worse—attempts at manipulating Google's algorithm. In a post about the incident, a blogger for the technology site *Search Engine Watch* argued that Rap Genius's decision to alert Google to potential rule violations by other lyrics sites "won't sit well with their competitors, and it doesn't sit well with many SEO professionals who live by a 'don't report spam' motto when it comes to competitors playing dirty" (Slegg, 2014). A similar code existed among communities of Instagram photographers. Sara Melotti, an Instagram photographer profiled in the *Daily Mail*, said that other photographers might resent her decision to share Instagrammers' "dirty little secrets" for boosting their visibility on the platform: "Some of them are not happy that I have revealed all of this but that's just because they are guilty of it themselves and are scared it will impact their success" (House, 2017).

Descriptions of content creators' responses to platform punishments often extended the crime metaphor, as "offenders" attempted to return to platforms' "good graces." The profile of Melotti framed her story as that of a reformed criminal seeking redemption and a legitimate life; the story of her past behavior on the platform, moreover, served as a cautionary tale:

Ms. Melotti simply hopes to find an ethical solution to the "monster" that has been created. "I'm quitting all the bulls**t, I'm done playing games, I want to do this the right way," she said. "Now you [aspiring Instagram content creators] have all the info I have, and you can make whatever you want with it. You can use this to play the game and join the mafia or maybe, just maybe, you can keep playing clean and know in your heart that the system is flawed and corrupted. You can do your best to make Instagram all about stories and creativity and the art and the work again." (House, 2017)

Media coverage of Rap Genius—and statements by the company itself—framed their experience in a similar fashion. An article in *Business Insider*, a business and financial news site, tapped a well-worn narrative of a gradual slide into a life of crime, noting that "Rap Genius says it wasn't always this way. It started off with legitimate links from relevant blogs. But, after a while, it got aggressive, and sloppy, which led to the bad blog links." The article then went on to describe Rap Genius's efforts to "clean itself up," which ultimately led to its reinstatement by Google (Yarow, 2014).

The crime metaphor taps into hegemonic cultural associations between criminal activity, individual culpability, and the moral deviance of "bad actors." It is worth noting that a small subset of articles considered the structural circumstances that might encourage or incentivize the use of bots, SEO, or "engagement bait." A story on Rap Genius in *Entrepreneur* magazine, while conceding that the startup had committed wrongdoing in its SEO approach, argued that the saga nonetheless "raises some big questions about how Google picks and chooses the sites it penalizes and the catch-22 this treatment creates for businesses trying to compete" (Lurie, 2014). Similarly, a writer for the business and technology site *Quartz* pointed out that Facebook had "originally helped create" the very types of attention-baiting headlines it was now penalizing (Kozłowska, 2017). These exceptions notwithstanding, the majority of articles held content creators individually responsible for running afoul of platform dictates, thus reinforcing platforms' paternalistic moral authority and validating their fearsome power over cultural producers.

Games and Cheating

Language of "gaming the system" was prevalent in our sample of news articles about all three cases. "Plenty of lifestyle bloggers, artists, and D-list celebrities who want to make money off sponsored posts have found other ways to game the system," read an article on the technology site *The Verge* about Instagram content creators, citing the formation of pods as one such way (Tiffany, 2017). Moreover, several articles described Rap Genius as having been punished by Google because it was trying to "game the algorithm" by artificially inflating its placement in search results. Similarly, Facebook's demotion of what the service derided as "engagement bait" was broadly framed as, in the words of an article in *Mediapost*, a trade publication for advertising and media professionals, "part of a broader battle against spammers and other system gamers" (O'Malley, 2017).

Several articles deploying the language of "gaming the algorithm" extended the metaphor, likening "gaming" to specific forms of cheating in sports. *Petapixel* compared botting services like Instagress to the use of steroids in professional sports, arguing that bots provide an "unfair advantage" and that the Instagram community should condemn

those who use bots just as we “vilify athletes for cheating the system” (Wilson, 2017). An article on the technology blog *Digiday* quoted a “freelance content creator for brands” who also adopted the “unfair advantage” framing: “If you’re a small, organically grown Instagrammer, how do you compete with someone who is corking the bat?” (Pathak, 2017). Other articles referred to botting, pods, and SEO as “playing dirty” (House, 2017).²

Similar to articles that used metaphors of crime to cast platforms as analogous to law enforcement, articles that employed cheating metaphors sometimes likened platforms’ responses to punishments from referees. For instance, an article in the technology news site *TechCrunch* referred to Rap Genius’s demotion as “time spent in the penalty box” (Perez, 2014), while an article in *Forbes* suggested that sites conduct an SEO audit to ensure they stay out of the penalty box (DeMers, 2014). Positioning platforms in the role of referee implies they are both authoritative and fair, while at the same time obscuring the fact that platforms may have financial interests in punishing some types of user behavior while rewarding others.

The Work of Authenticity Metaphors

As scholars like Gillespie (2017) and Ziewitz (2019) have noted, the distinction between gamed and genuine content is predominantly an artificial one. Yet, platforms’ discourses of authenticity, as well as the food, sports, and crime metaphors deployed in media narratives, manufacture a marked division between the two. And while these metaphors differ in many respects, they all cement platform paternalism, insofar as each metaphor positions digital intermediary companies as paternalistic arbiters of authenticity and virtue, whose intervention in cases of user malfeasance is both in users’ ultimate best interest and necessary for “good content” to flourish in a platform-maintained content meritocracy. This becomes especially clear when considering the advice platforms furnish to content creators as alternatives to “gaming the system.” For example, Google’s page discouraging site owners from engaging in the kind of “link schemes” of which Rap Genius was accused tells readers: “The best way to get other sites to create high-quality, relevant links to yours is to create unique, relevant content that can naturally gain popularity in the Internet community. Creating good content pays off” (Google, n.d.). Instagram, meanwhile, encourages its “community” to “foster meaningful and genuine interactions” while enlisting users to “help us stay spam-free by not artificially collecting likes, followers, or shares, posting repetitive comments or content, or repeatedly contacting people for commercial purposes without their consent” (Instagram, n.d.).

Similarly, one of Facebook’s company blog posts on “publishing best practices” exhorts publishers to “catch [their] audience’s attention by sharing non-clickbait content that your audience cares about and driving the

conversation with your personal voice” (Facebook, 2017). Instead of relying on curiosity gap headlines to elicit clicks, the page recommends that publishers “try using text prompts and calls-to-action in your posts to encourage engagement.” Strikingly, these are the very practices that the company subsequently labeled as “engagement bait” and demoted later that same year. The abruptness of this reversal provides a vivid illustration of the platform-constructed, ephemeral, and often arbitrary nature of the boundary between practices labeled “gaming” and those considered to be legitimate content creation.

Platforms’ instructions to content creators to eschew strategic visibility-enhancing tactics such as using bots and forming reciprocal engagement agreements and to instead focus on creating “high-quality,” “meaningful” content that expresses the creator’s “personal voice” illuminates a striking double standard. Large technology companies are known to valorize fast growth, scalability, efficiency, and the use of automation whenever possible (Levina & Hasinoff, 2017). Yet, from content creators, they demand nearly the polar opposite—an artisanal, non-instrumental approach to cultural production.

Such a double standard serves two purposes simultaneously: first, it allows platforms to shore up their reputations as meritocracies in which the best content will, with just a bit of help from a sophisticated evaluative algorithm, rise to the top. Second, it serves platforms’ economic interests by insinuating that explicitly strategic, economically oriented activity should be funneled to platforms’ paid promotion channels. When Instagram’s “community guidelines” warn content creators against “repeatedly contacting people for commercial purposes without their consent,” the company is essentially describing what Instagram encourages content creators to do in the form of paid advertisements on the platform. By suggesting that commercially oriented activity in non-paid channels does not merely run afoul of platform rules but is also ethically bankrupt, the platforms create a powerful moral framework to support and validate their own interests.

Conclusion

A decade ago, digital media platforms were seen as a tremendous boon to content creators (e.g., Bruns, 2008; Jenkins, 2006); yet, early perspectives on their democratic potential have proven largely myopic. Most would concede that today’s data-driven digital platforms provide cultural producers with the potential to broaden their reach and boost their revenue; however, these opportunities can exact a profound cost—both to creator-workers’ labor conditions and to the cultural products that get circulated to mediated publics. Innovations in metrics and measurement are especially vexed for cultural producers: they provide granular data on impact and audience at the same time that they intensify the demands for successful content distribution, promotion, and accounting (Anderson, 2013; Carlson, 2018; Duffy, 2013; Gandini, 2016; Napoli, 2014; Petre, 2018). Our analysis has highlighted how these

pressures are enacted in discourses of algorithmic optimization. In particular, we have examined the patterned ways in which the corporate behemoths behind services like Google and Facebook engage in normative boundary work with communities of cultural producers.

The metaphors we examined—including those that condemn visibility-enhancing tactics as *contamination*, *crime/moral deviance*, and *cheating*—make clear how the boundaries around “authenticity” are produced and policed in platform environments. Collectively, these metaphors enable platform representatives to cast optimization efforts as violations of platform sanctions and, tellingly, as morally condemnable. These normative boundaries obscure the corporate instrumentality of platforms’ actions, instead discursively positioning them as paternalistic figures in the realm of cultural production. In other words, Google, Facebook, and others of their ilk are not merely influential actors by virtue of their resources and structural position; they are also moral authorities acting in their users’ best interest at all times. Such *platform paternalism* lends legitimacy to their punitive responses toward the content creators they accuse of algorithmic manipulation and enhances their already-considerable sway over the cultural industries.

Platform paternalism also establishes a double standard, whereby tactics that are valorized as innovative when practiced by platforms (e.g., using automation to replace human labor whenever possible, “getting big fast”) are portrayed as unduly manipulative—even corrupt—when deployed by cultural producers. The salience of the platform paternalism framework may help explain how platforms have successfully resisted calls for transparency and public accountability in other areas as well, such as data privacy, content moderation guidelines, and monopolistic business practices; it bears noting, however, that an accumulation of recent high-profile scandals in these arenas has begun to weaken claims to such moral authority.

The implications of both gaming accusations and subsequent punitive responses vary considerably across categories of cultural producers, reflecting larger disparities among creator communities. Rap Genius, buoyed by its ample venture capital funding, was able to devote significant resources to identifying and purging inbound links that Google deemed “unnatural” and to promoting itself via alternative means. By contrast, freelance creator communities who lost access to Instagress struggled to find alternative affordable ways to enhance their visibility on Instagram. Some joined pods, or groups in which members promise each other reciprocal engagement, but these too have been widely disparaged as “gaming” in media accounts (see, Cotter, 2019; O’Meara, this issue). While pods are not (yet) officially banned by Instagram, several groups organizing them were recently purged from Facebook, Instagram’s parent company (Kantrowitz, 2018)—suggesting that platform-drawn lines between illegitimate gaming and legitimate strategic action may soon shift once again in a way that disproportionately affects independent cultural workers. Such systematic unevenness is exacerbated

by other inequalities that characterize the realm of digital cultural production, including those linked to social identity (Bishop, 2018; Duffy & Hund, 2015) and the acquisition of algorithmic skills (Klawitter & Hargittai, 2018).

Given that accusations of system-gaming have been relatively understudied by scholars of platformized cultural production, future research can build on our contribution in several respects. Our case studies were US-focused, so it is perhaps unsurprising that much of the metaphorical language we observed (e.g., the “penalty box,”) may be particularly resonant in the North American context. Future scholarship could examine platforms’ accusations of gaming in other national and regional contexts to determine, first, which types of user behavior tend to be singled out and, second, whether the normative metaphors used by platforms and the press to characterize system-gaming take on a different tenor. In addition, future research could examine how creative workers respond to platform accusations of system-gaming. Do cultural producers accept or reject platforms’ normative framing of their visibility-enhancing behaviors? If the latter, how do they contest or develop workarounds to circumvent platform rules? Insight into such resistance or workarounds can shed light onto what Gillespie (2014) describes as “algorithmic entanglements,” which account for user experiences with the algorithm and are part of a “recursive loop between the calculations of the algorithm and the ‘calculations’ of people” (p. 183).

To be sure, we are not implying that platforms are amoral spaces: as with any sphere of social action, there is a normative element to user behavior on platforms—as recent controversies over abuse and harassment, data theft, and election interference have plainly reminded us. Though the line between acceptable and unacceptable user behavior will necessarily be fraught, continually shifting, and arbitrary to some degree, it must nevertheless be drawn. The problem we have illuminated is not the *existence* of such boundaries on digital platforms, but the fact that platform companies continue to draw and police these boundaries unilaterally and unaccountably. More troubling, still, is that the rules, guidelines, and punishments that have emerged from this fundamentally undemocratic system of platform governance seem to reflect digital intermediaries’ powerful structural position and commercial interests, rather than a coherent understanding of normative concepts such as manipulation, deception, and authenticity. The deliberative process according to which definitions of algorithmic manipulation are formulated and enforced must be democratized to grant influence to a wider array of social actors—perhaps especially, those cultural producers whose very livelihoods depend on algorithmic visibility.

Acknowledgements

The authors would like to thank Thomas Poell for his editorial guidance, the anonymous reviewers for their productive recommendations, and the participants in the Platformization of Cultural Production workshop for their invaluable feedback.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Notes

1. Although Facebook has owned Instagram since 2012, we have chosen to analyze them as separate platforms for two reasons: first, at the time of the incidents in question, Instagram still operated largely independently from Facebook (though this is changing—see Newton, 2018); second, the unique features and affordances of each platform meant that they applied the “gaming” label to differentiate distinct types of user behavior.
2. The language of “system-gaming” furnishes a discursive link between the sports metaphors described here and the crime metaphors discussed above, insofar as it evokes enduring racialized discourses about “welfare cheats” and other members of the “undeserving poor” who are portrayed as manipulating government programs to avoid paid work (Cohen, 1972; Gilens, 1999).

References

- Anderson, C. W. (2013). Towards a sociology of computational and algorithmic journalism. *New Media & Society, 15*, 1005–1021.
- Ang, I. (2006). *Desperately seeking the audience*. New York, NY: Routledge. (Original work published 1991)
- Ball, J. (2018, July 20). We need a new model for tech journalism. *Columbia Journalism Review*. Retrieved from https://www.cjr.org/business_of_news/tech-journalism.php
- Banet-Weiser, S. (2012). *Authentic™: The politics of ambivalence in a brand culture*. New York: New York University Press.
- Bishop, S. (2018). Anxiety, panic and self-optimization: Inequalities and the YouTube algorithm. *Convergence, 24*, 69–84.
- Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and beyond: From production to produsage* (Digital Formations, 45). New York, NY: Peter Lang.
- Bucher, T. (2012). Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. *New Media & Society, 14*, 1164–1180.
- Bucher, T. (2017). The algorithmic imaginary: Exploring the ordinary affects of Facebook algorithms. *Information, Communication & Society, 20*, 30–44.
- Carlson, M. (2018). Automating judgment? Algorithmic judgment, news knowledge, and journalistic professionalism. *New Media & Society, 20*, 1755–1772.
- Cohen, S. (1972). *Folk devils and moral panics*. London, England: MacGibbon & Kee.
- Consalvo, M. (2009). *Cheating: Gaining advantage in video games*. Cambridge, MA: MIT Press.
- Cotter, K. (2019). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society, 21*, 895–913. doi:10.1177/1461444818815684
- Décaillet, Q. (2017, May 13). Mass planner shut down by Instagram. *Fstoppers*. Retrieved from <https://fstoppers.com/social-media/mass-planner-shut-down-instagram-end-bot-era-176654>
- DeMers, J. (2014, January 13). How to avoid the fate of Rap Genius when doing SEO. *Forbes*. Retrieved from <https://www.forbes.com/sites/jaysondemers/2014/01/13/how-to-avoid-the-fate-of-rap-genius-when-doing-seo/#40a76cac2f44>
- DeVito, M. A., Gergle, D., & Birnholtz, J. (2017). Algorithms ruin everything: #RIPTwitter, folk theories, and resistance to algorithmic change in social media. In *Proceedings of the 2017 CHI conference on human factors in computing systems* (pp. 3163–3174). Association for Computing Machinery. Retrieved from <https://dl.acm.org/citation.cfm?id=3025659>
- Dick, M. (2011). Search engine optimisation in UK news production. *Journalism Practice, 5*, 462–477. doi:10.1080/17512786.2010.551020
- Duffy, B. E. (2013). *Remake, remodel: Women's magazines in the digital age*. Champaign: University of Illinois Press.
- Duffy, B. E., & Hund, E. (2015). “Having it all” on social media: Entrepreneurial femininity and self-branding among fashion bloggers. *Social Media+ Society, 1*(2), 1–11. doi:10.1177/2056305115604337
- Duffy, B., & Hund, E. (2019). Gendered visibility on social media: Navigating Instagram’s authenticity bind. *International Journal of Communication, 13*, 20. Retrieved from <https://ijoc.org/index.php/ijoc/article/view/11729>
- Eslami, M., Rickman, A., Vaccaro, K., Aleyasen, A., Vuong, A., Karahalios, K., . . . Sandvig, C. (2015). “I always assumed that I wasn’t really that close to [her]”: Reasoning about invisible algorithms in news feeds. In *Proceedings of the 33rd annual ACM conference on human factors in computing systems* (pp. 153–162). Association for Computing Machinery. Retrieved from <https://dl.acm.org/citation.cfm?id=2702556>
- Espeland, W. N., & Sauder, M. (2007). Rankings and reactivity: How public measures recreate social worlds. *American Journal of Sociology, 113*, 1–40.
- Facebook. (2017, March 17). Drive reach and referrals without clickbait. *Facebook for Media*. Retrieved from <https://www.facebook.com/facebookmedia/blog/drive-reach-and-referrals-without-clickbait>
- Gamson, W., Croteau, D., Hoynes, W., & Sasson, T. (1992). Media images and the social construction of reality. *Annual Review of Sociology, 18*, 373–393.
- Gandini, A. (2016). *The reputation economy: Understanding knowledge work in digital society*. New York, NY: Springer.
- Gans, H. (1979). *Deciding what’s news: A study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. New York, NY: Random House.
- Genius. (2014, January 4). Rap Genius is back on Google. *Genius*. Retrieved from <https://genius.com/Genius-founders-rap-genius-is-back-on-google-annotated>
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge, MA: MIT Press.
- Gilens, M. (1999). *Why Americans hate welfare*. Chicago, IL: The University of Chicago Press.

- Gillespie, T. (2010). The politics of “platforms.” *New Media & Society*, 12, 347–364.
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. Boczkowski, & K. Foot (Eds.), *Media technologies* (pp. 167–194). Cambridge, MA: MIT Press.
- Gillespie, T. (2017). Algorithmically recognizable: Santorum’s Google problem, and Google’s Santorum problem. *Information, Communication & Society*, 20, 63–80.
- Gillespie, T. (2018). *Custodians of the internet*. New Haven, CT: Yale University Press.
- Gilliland, N. (2017, May 5). Will Instagram pods impact influencer marketing? *Econsultancy*. Retrieved from <https://econsultancy.com/will-instagram-pods-impact-influencer-marketing/>
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing.
- Google. (n.d.). “Quality guidelines: Link schemes.” *Google*. Retrieved from <https://support.google.com/webmasters/answer/66356?hl=en>
- Halavais, A. (2017). *Search engine society*. Hoboken, NJ: John Wiley. (Original work published 2009)
- Halls, E. (2018, March 19). How to make it as an Instagram influencer. *GQ*. Retrieved from <https://www.gq-magazine.co.uk/article/how-to-be-an-instagram-influencer>
- Hearn, A. (2010). Structuring feeling: Web 2.0, online ranking and rating, and the digital “reputation” economy. *ephemera*, 10, 421–438.
- House, L. (2017, May 12). Instagram created a monster: Travel blogger comes clean about the “dirty little secrets” behind some of your favourite accounts—From an exclusive “MAFIA” to paid comments and likes. *The Daily Mail Australia*. Retrieved from <https://www.dailymail.co.uk/femail/article-4497724/Travel-blogger-comes-clean-tactics-used-Instagram.html>
- Instagram. (n.d.). Community Guidelines. *Instagram*. Retrieved from <https://help.instagram.com/477434105621119>
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Kantrowitz, A. (2018, May 11). Facebook removes 10 Instagram algorithm-gaming groups with hundreds of thousands of members. *BuzzFeed*. Retrieved from <https://www.buzzfeednews.com/article/alexkantrowitz/facebook-removes-ten-instagram-algorithm-gaming-groups-with#.tu6765MwX>
- Klawitter, E., & Hargittai, E. (2018). “It’s like learning a whole other language”: The role of algorithmic skills in the curation of creative goods. *International Journal of Communication*, 12, 3940–3510.
- Kozłowska, H. (2017, December 18). Facebook will now penalize posts begging for likes, shares, and comments. *Quartz*. Retrieved from <https://qz.com/1159467/facebook-will-now-penalize-posts-that-ask-for-likes-shares-and-comments/>
- Lakoff, G. (1995). Metaphor, morality, and politics, or, why conservatives have left liberals in the dust. *Social Research*, 62(2), 1–22.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: The University of Chicago Press.
- Levina, M., & Hasinoff, A. A. (2017). The Silicon Valley ethos: Tech industry products, discourses, and practices. *Television & New Media*, 18, 489–495.
- Luker, K. (2008). *Salsa dancing into the social sciences: Research in an age of info-llut*. Cambridge, MA: Harvard University Press.
- Lurie, I. (2014, January 3). Why the Rap Genius story is really about Google. *Entrepreneur*. Retrieved from <https://www.entrepreneur.com/article/230602>
- Marbach, J. (2013, December 23). RapGenius growth hack exposed. *Hacker News*. Retrieved from <https://news.ycombinator.com/item?id=6956658>
- Marwick, A. E. (2013). *Status update: Celebrity, publicity, and branding in the social media age*. New Haven, CT: Yale University Press.
- Mosseri, A. (2016, June 26). Building a better news feed for you. *Facebook Newsroom*. Retrieved from <https://newsroom.fb.com/news//building-a-better-news-feed-for-you/201606>
- Myers West, S. (2018). Censored, suspended, shadowbanned: User interpretations of content moderation on social media platforms. *New Media & Society*, 20(11), 4366–4383.
- Napoli, P. M. (2014). On automation in media industries: Integrating algorithmic media production into media industries scholarship. *Media Industries Journal*, 1(1). Retrieved from <https://quod.lib.umich.edu/m/mij/15031809.0001.107/-on-automation-in-media-industries-integrating-algorithmic?rgn=main;view=fulltext>
- Newton, C. (2018, September 25). The end of Instagram as we know it is here. *The Verge*. Retrieved from <https://www.theverge.com/2018/9/25/17903556/instagram-founders-quit-kevin-systrom-mike-krieger-facebook>
- Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New Media & Society*, 20, 4275–4292.
- O’Malley, G. (2017, December 19). Facebook demotes posts that use engagement bait. *Mediapost*. Retrieved from <https://www.mediapost.com/publications/article/311802/facebook-demotes-posts-that-use-engagement-bait.html>
- O’Meara, V. (this issue) Weapons of the chic: Instagram influencer engagement pods as practices of resistance to Instagram platform labor. *Social Media + Society*.
- Pasquale, F. (2015). *The black box society*. Cambridge, MA: Harvard University Press.
- Pathak, S. (2017, July 26). Podghazi: Instagram influencers use comment collusion to game the algorithm. *Digiday*. Retrieved from <https://digiday.com/marketing/podghazi-instagram-influencers-use-comment-collusion-game-algorithm/>
- Perez, S. (2014, January 3). When growth hacking goes bad. *TechCrunch*. Retrieved from <https://techcrunch.com/2014/01/03/when-growth-hacking-goes-bad/>
- Petre, C. (2018). Engineering consent: How the design and marketing of newsroom analytics tools rationalize journalists’ labor. *Digital Journalism*, 6, 509–527.
- RT. (2017, December 28). Facebook launches purge of “engagement bait.” Retrieved from <https://www.rt.com/news/413536-facebook-battles-engagement-bait/>
- Salisbury, M., & Pooley, J. (2017). The# nofilter self: The contest for authenticity among social networking sites, 2002–2016. *Social Sciences*, 6(1), 10, 1–24.
- Shapin, S. (2006, May 16). Paradise sold. *The New Yorker*. Retrieved from <https://www.newyorker.com/magazine/2006/05/15/paradise-sold>

- Silverman, H., & Huang, L. (2017, December 18). Fighting engagement bait on Facebook. *Facebook Newsroom*. Retrieved from <https://newsroom.fb.com/news/2017/12/news-feed-fyi-fighting-engagement-bait-on-facebook/>
- Slegg, J. (2014, January 7). Rap Genius no SEO genius: Lyric site fails to recover traffic after Google penalty. *Search Engine Watch*. Retrieved from <https://searchenginewatch.com/sew/news/2321516/rap-genius-no-seo-genius-lyric-site-fails-to-recover-traffic-after-google-penalty>
- Stark, L., & Hoffman, A. L. (2019). Data is the new what? Popular metaphors & professional ethics in emerging data culture. *Journal of Cultural Analytics*. Advance online publication. doi:10.22148/16.036
- Tiffany, K. (2017, April 20). Popular Instagram bot site Instagress has been shut down. *The Verge*. Retrieved from <https://www.theverge.com/2017/4/20/15374080/instagram-bot-site-instagress-dead>
- Tuchman, G. (1978). *Making news: A study in the construction of reality*. New York, NY: Free Press.
- Turow, J. (1997). *Breaking up America: Advertisers and the new media world*. Chicago, IL: The University of Chicago Press.
- Usher, N. (2010, September 23). What impact is SEO having on journalists? Reports from the field. *Nieman Journalism Lab*. Retrieved from <https://www.niemanlab.org/2010/09/what-impact-is-seo-having-on-journalists-reports-from-the-field/>
- Whitney, A. (2013, December 27). Speed read: The outrageous Christmas gift Kanye gave Kim. *PopSugar*. Retrieved from <https://www.popsugar.com/celebrity/Kanye-West-Gives-Kim-Kardashian-Nude-Birkin-Bag-33153671>
- Wilson, C. (2017, April 6). I spent two years botting on Instagram—Here's what I learned. *PetaPixel*. Retrieved from <https://petapixel.com/2017/04/06/spent-two-years-botting-instagram-heres-learned/>
- Yarrow, J. (2014, January 4). After getting nuked by Google, Rap Genius groveled and self-flagellated—And now they're back. *Business Insider*. Retrieved from <https://www.businessinsider.com/rap-genius-is-back-in-googles-rankings-2014-1>
- Ziewitz, M. (2019). Rethinking gaming: The ethical work of optimization in web search engines. *Social Studies of Science*, 49, 707–731.

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