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DOI

10.1177/2056305120943273

Publication date 2020

Document Version
Final published version
Published in
Social Media + Society
License
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Link to publication

Citation for published version (APA):

Nieborg, D. B., Duffy, B. E., & Poell, T. (2020). Studying Platforms and Cultural Production: Methods, Institutions, and Practices. *Social Media + Society*, *6*(3). https://doi.org/10.1177/2056305120943273

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Social Media + Society July-September 2020: I-7 © The Author(s) 2020 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/2056305120943273 journals.sagepub.com/home/sms



Studying Platforms and Cultural Production: Methods, Institutions, and Practices

David B Nieborg (D), Brooke Erin Duffy (D), and Thomas Poell³

Abstract

This introduction to the second special collection of articles on the platformization of the cultural industries foregrounds research methods and practices. Drawing from the 12 articles included in this collection, as well as the 14 articles published in the first collection, we identify commonalities in approaches, consistencies in traditions, and uniform modes of analysis. We argue that approaches that have been deployed in media industry studies for decades—semi-structured interviews, discourse analysis, content analysis, and participant observation—remain productive. At the same time, transformations in the temporalities and curation of cultural production require updated modes of investigation and analysis. As such, we spotlight contributors' novel methods and innovative theoretical approaches, such as the walkthrough method and multi-sided market theory.

Keywords

platforms, platformization, cultural production, methods, institutions

Introduction

The abrupt onset of the COVID-19 pandemic and the subsequent lockdown of cities around the globe generated a staggering spike in digital platform usage. Quite suddenly, hundreds of millions of users became even more dependent on platforms and apps to work, socialize, learn, and be entertained. This process of platformization validates what Plantin and Punathambekar (2019) aptly describe as the "infrastructural turn in media and communication studies": platforms are elevated to the status of being vital utilities. It was likely a similar recognition that prompted former Google CEO Eric Schmidt (2020) to publish an op-ed for the Wall Street Journal, wherein he proclaimed that the United States "is long overdue for a real digital infrastructure." What would that digital infrastructure look like? Schmidt suggested a further encroachment of platform infrastructures into sectors such as health, education, and internet connectivity. In his hypothetical model, US taxpayers would be required to subsidize a public/private partnership between the US government and technology companies—two institutions with a historically fraught relationship.

If it was not already clear, COVID-19 swept away the last remnants of doubt. Only 2 years after the "techlash"—a term invoked by journalists and critics to capture the rising tide of criticism against platform companies—the digital infrastructures of Amazon, Google, Facebook, Apple, and Microsoft have proven too big to fail, too unwieldy to regulate. A "reckoning" with big tech, in the words of Wired journalist Steven Levy (2020), "doesn't seem sustainable at a moment when, to prop up our diminished lives, we are desperately dependent on what they've built."

Despite our "desperate" dependency, such a reckoning is long overdue—especially when one considers that platform companies are emerging as one of the few benefactors of a fast-approaching global economic calamity that has already left many industrial sectors in dire straits. Platform markets remain driven by a winner-takes-all logic, even in a time of crisis. Or perhaps, especially so in a time of crisis. Throughout the first months of the pandemic, amid some obligatory dips, stock prices of US-based technology companies remained

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steady or soared. If Eric Schmidt's prognostication is any indication, social distancing and self-isolation force a fullblown (re)turn to platform dependency among citizens and cultural producers. This raises a question that is at the heart of this special collection: How exactly will an increase in platform-dependency impact cultural producers? So far, the crisis has been a net negative. With work in the cultural industries being notoriously precarious (Gill & Pratt, 2008), and platform labor particularly so (Close & Wang; Duguay, 2019; O'Meara, 2019), it is perhaps not surprising that legions of cultural producers have been furloughed or fired. Feeble labor laws mean that cultural workers—many of them freelancers or "gig workers"—are left without financial lifelines. And, so, if the early months of COVID-19's impact are any indication, those working in both legacy cultural industries and emerging sectors such as social media entertainment are in for a very rough ride.

Fashion and travel influencers on TikTok, YouTube, and Instagram saw their main sources of revenue—advertising and paid sponsorships—fizzle out over a span of mere weeks (Tsapovsky, 2020). Add to that the challenge of maintaining authenticity, which is considered a key tenant of social media success (see Arriagada & Ibáñez; Duffy, 2017). Projecting authenticity—seeming *relatable*, *real*, *and visible*—while being forced to stay inside proved daunting for many influencers. Alternatively, flaunting one's wealth, success, and aspirational imagery has proven distasteful and, in some cases, generated considerable backlash (Stoppard, 2020). Major news organizations, for their part, seem able to take the first economic hits in stride. Local newspapers and magazines, on the other hand, are struggling, laying off staff by the dozens (Luo, 2020).

This variation in financial impact can also be observed in the music industry, where certain sectors are feeling the turbulence, while others are taking advantage of changed user behavior. Rolling Stone pronounced the early days of the lockdown "the week the music stopped" as concerts and festivals were canceled (Hissong et al., 2020). Music platforms, particularly those that offered the possibility of live-streaming concerts, emerged as potential fallback options. Bandcamp, described by Hesmondhalgh et al. (2019) as a "producer-oriented" music platform popular among smaller, independent bands, waived its fees on sales for a day. Spotify, meanwhile, promised to match donations up to US\$10 million from listeners to national organizations supporting musicians impacted by the crisis. At the same time, Spotify used its financial prowess to expand its podcast offerings in a move that Sullivan (2019) seemed to anticipate in his analysis of the platformization of podcasting. In exchange for an exclusive deal with US comedian Joe Rogan, the platform reportedly paid US\$100 million—the equivalent of "23 billion streams on Spotify" by any of the lesser known podcasters and musicians (Weiss, 2020).

Institutions and Practices

Well before the start of the crisis, two of us drew attention to the *institutional* dimension of the platformization of cultural production, which concerns a shift in markets, governance, and infrastructures (Nieborg & Poell, 2018, p. 4276). We argued in our initial article that cultural production is progressively contingent on platform companies. Then, together with 30 authors, we explored how to systematically account for this shift and to challenge its underlying premises. These conversations resulted in the first special collection for this journal, which was published in late 2019. Comprised of 14 original articles, the first collection was clustered around four themes: continuity and change; diversity and creativity; labor in an age of algorithmic systems; and power, autonomy, and citizenship. In the introduction to the first special issue, we pointed to the limits of our initial framework, which leaned too heavily on an institutional perspective on platform power—much to the expense of bottom-up activities. Therefore, we included the notion of "platform practices," which we defined "as the strategies, routines, experiences, and expressions of creativity, labor, and citizenship that shape cultural production through platforms" (Duffy et al., 2019, p. 2).

This second special collection contains 12 original articles, each of which in their own way, again cross cultural, geographic, and sectoral—industrial boundaries. We introduce the articles by discussing a number of overarching themes, but this time with a specific focus on methods. The luxury of 26 full-length articles clustered around one overarching research question is that they allow us to tease out commonalities in approaches while identifying variance across research traditions, cultures, and contexts. Although our primarily focus is on the articles in this collection, we tried to draw connections to the papers in first collection as well.

The onset of COVID-19 instilled in all of us a sense of urgency. The struggles of larger numbers of creators, the uncertain fate of many journalists and musicians, and the untapped power of platform companies, call for a solid toolbox to investigate how this unfolding crisis is reshaping the cultural landscape. Even though the focus of our work—media and communication—may make us anything but "essential workers" in the conventional sense, what we can offer is rigorous, empirical investigations into cultural production to ensure their vibrancy, diversity, and significance in the challenging months and years ahead.

Proven Methods

When considering methods to investigate platform-dependent cultural production, it becomes clear that not all wheels need to be reinvented. On the contrary, approaches that have been deployed in media industry studies for decades have proven as productive as ever. At the same time, transformations in the Nieborg et al. 3

temporalities and curation of cultural production require novel—or at least updated—modes of investigation.

What is striking about the papers in this collection is how they collectively sidestep long-standing debates on the tension between focusing either on industry or culture, or the tension between (super)structure and agency. As argued by Hesmondhalgh (2012/2019),

The real goal of discussions about theory and method in relation to media and popular culture . . . should be to understand the potential contributions and limitations of the key approaches, and to synthesise the best aspects of them, according to which particular research questions are being addressed. Discussions organised around simple dichotomies such as political economy versus cultural studies were never likely to achieve this goal. (pp. 73–74)

Let us focus, therefore, on the inherent limitations of the qualitative methods we listed; many of these limitations are practical and logistical in nature, and have confounded media production scholars for decades.

Lee and Zoellner (2019) list a number of such persistent barriers and constraints endemic to this type of research. For starters, media organizations are far from keen to open their doors to outsiders; industry scholars thus confront the challenge of access and gatekeeping. Platform companies, arguably, are even less keen to make their employees available. Consequently, few authors in our two collections gained direct access to informants working for dominant platform companies—a move that calls for a revival, or perhaps reappraisal of anthropological notions of "studying up" (Nader, 1969; see also, Sullivan, 2016).

Serving as an exception to the proverbial rule is the research on the platformization of creativity in US television production by Annemarie Navar-Gill, who leveraged access to 54 industry informants, 12 of whom were formerly or are currently employed as writers for Amazon, Hulu, and Netflix. This allowed her to dispel the myth of wholly data-driven television productions while also challenging the purported increase in creative freedom among storytellers. Another notable exception is the article by Lin and de Kloet (2019), which drew upon 14 interviews with media professionals working for the Beijing-based Kuaishou company, that operates the popular algorithm-based video and live-streaming platform under the same name. Other contributors negotiated facetime with employees of cultural organizations. Sticking with their mandates as public-funded organizations, public broadcasters in the Netherlands, as shown in the contribution by Karin van Es and Thomas Poell, and in Italy and the United Kingdom (Bonini & Gandini, 2019) were willing to grant the researchers access to employees.

Other than obtaining access to organizations and their staff, Lee and Zoellner (2019) note how media production research is also hampered by the availability of resources, most especially time and funding. Some research questions, particularly those pertaining to company culture and the

lived reality of work, favor long-term projects that necessitate months or even years of ethnographic research or participatory observation. Such investments have largely become the domain of doctoral students and postdoctoral researchers, which is quite visible in our collections that feature a number of exciting early career projects. For instance, there is the 2-year long online observation by Ji-Hyeon Kim and Jun Yu (2019) of Korean webtoon producers, along with the extensive ethnographic work with US-based crafters by Samantha Close and Cynthia Wang, featured in this collection. As part of her doctoral project, Sophie Bishop (2020) immersed herself for 3 years in YouTube's creator culture, which allowed her to gain access to key "algorithmic experts." And included in this collection is Tamara Kneese's past doctoral project on the vintage economy, which builds on participant observation in record stores and clothing boutiques and 20 semistructured interviews (Kneese and Palm).

Another constant across the papers is their fit within the long-standing research tradition of media industry studies, understood as "qualitatively oriented, critically minded scholars working in humanistic traditions" (Holt & Perren, 2019, p. 31). The majority of articles in both collections deploy qualitative, mixed-methods approaches that include semi-structured interviews, discourse analysis, content analysis, and (participant) observation. An example of such a qualitative mixed-method approach is the contribution by Robyn Caplan and Tarleton Gillespie on YouTube's "tiered" governance structure. Their analysis of 90 videos featuring creators provides insight in the communal displeasure with YouTube's "demonetization" practices. Six additional semi-structured interviews with creators are used to shed light on the impact of a sudden drop in revenue. Discourse analysis of YouTube's corporate communications, in turn, allowed the researchers to track changes in the platform's revenue-sharing arrangements as they become increasingly formalized.

To study platform evolution, Arturo Arriagada and Francisco Ibáñez take a similar mixed methods approach as they combine 35 semi-structured interviews with Chilean fashion and lifestyle creators with content analysis of Instagram images and ephemeral "Stories." Drawing on a "platform sensitive approach" (Bucher & Helmond, 2018), Arriagada and Ibáñez highlight how the introduction of the latter feature—the ability to post photos and videos that disappear after 24 hr—fundamentally changes creators' communication styles, their working routines, and the relationship with other stakeholders, such as branding agencies and audiences.

New Methodological Challenges

An important reason why the aforementioned articles are so firmly rooted in existing methodological paradigms is because they focus on *media work*. While creative labor has seen massive transformations over the last decades, to study its routines, dominant practices, or its intersectional nature does not require a wholesale reorientation of one's methodological

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apparatus. Studying the institutional dimension (i.e., the political economic, governmental, and infrastructure) of the shift toward platform-dependent cultural production, to the contrary, introduces challenges that call for methodological innovation. As software studies scholars have demonstrated, platforms come with their own set of research affordances. As "devices," digital platforms can be "both part of the methodology and the object of study" to analyze how they "format and formalize cultural, social and other relations" (Weltevrede, 2016, p. 15). An example of an intervention sensitive to a digital device's research affordances is the "walkthrough method," which provides a formalized structure to study an individual app's intended or implied purpose, users, and use (Light et al., 2018). In her study of the different modes of labor of queer creators on Instagram and Vine, Duguay (2019) demonstrates the versatility of this approach by extending it to the domain of cultural production. Similarly, Lin and de Kloet (2019) utilized the walkthrough method to structure their app analysis of Kuaishou.

What may have been impossible to pull off in a pre-digital media environment is the ambitious project by Aymar Jean Christian, Faithe Day, Mark Díaz, and Chelsea Peterson-Salahuddin. Rather than relying on incumbent platform companies to access data, Christian, together with intersectional artists and community members, founded OTV (Open Television), a Chicago-based "counter" platform. As an example of "participatory action research," OTV distributes "original intersectional TV programming to multiple social media platforms." As with any other digital platform, OTV generated a wealth of data, which the authors leverage to great effect, demonstrating the potential insights that can be gleaned from quantitative data (views, tweets, reviews, etc.) when supplemented with qualitative analysis.

Next, we discuss contributions that each in their own way explore platform-specific research affordances. By grouping them into three overlapping categories—platform economics, platform evolution, and platform geographies—we highlight themes rooted in different—yet complementary—epistemologies and analytical approaches.

Platform Economics

Contemporary research in the fields of mainstream economics and management highlights the role of platform companies in governing complex, fast-evolving multi-sided markets with each "side" constituting a variety of users, ranging from endusers to companies and governments (Jacobides et al., 2018). Compared with legacy media conglomerates, platforms are guided by business models that foreground connectivity between users and producers over creating, commissioning, and licensing intellectual property (Cunningham & Craig, 2019). Platform companies' focus on aggregation and distribution rather than production allows them to scale up quickly and to subsequently dominate markets. The contribution by David Nieborg, Chris Young, and Daniel Joseph critically engages

with multi-sided market theory to survey the implications of global platforms on national economies. Focusing on the Canadian instance of Apple's iOS App Store, they employ financial analysis to examine 3 years of transactional data of game apps. As recent work in software studies demonstrates, compared with physical stores (and markets), one of the research affordances of app stores is their transparency as they allow for automated data scraping (Gerlitz et al., 2019). The researchers' conclusion—namely that a handful of predominantly United States and China-based companies take in the majority of app-based revenue—is indicative of the economic power asymmetries across regions and companies. Moreover, despite the supposed "democratization" of the tools of game production described by Maxwell Foxman (2019), Apple's App Store is a winner-takes-all economy *par excellence*.

William Partin's contribution is equally concerned with the role of platform companies as operators of markets. Also building on recent work in management studies, he theorizes "platform capture," a process in which platform operators, in this case the live-streaming platform Twitch, compete with cultural producers by "enveloping" (i.e., taking over, copying, or implementing) the products or technology of producers into their platform's core infrastructure. Not only does Partin's work show that Twitch is an important platform to research the experimentation with new revenue models (Johnson & Woodcock, 2019), it also reveals how its parent company (Amazon Inc.) integrates technologies and services of its disparate sub-divisions, such as e-commerce and cloud hosting, into the platform. Employing digital methods (Gerlitz et al., 2019; Weltevrede, 2016), Partin retraces Twitch's changes, thereby benefiting from the historical affordances of the web as an archive; indeed, he analyses digital documents, including developer resources, statements from professional streamers, and public announcements from the platform.

Whereas studying app stores and Twitch's institutional relationships concerns an ecosystem level of analysis, Robert Prey's paper takes the playlist feature, provided by music streaming platform Spotify, as his unit of analysis. In a productive dialogue with the work of Bonini and Gandini (2019), Prey follows a classical political economic mode of inquiry by conducting a close reading of press, trade publications, and Spotify's obligatory Securities and Exchange Commission filings. His argument is that playlists allow for a broader analysis of how the company's power derives from its ability to coordinate different markets: for music, advertising, and finance.

By understanding platforms not only as conduits or intermediaries but explicitly as markets, these papers collectively demonstrate the value of critically engaging with work outside the fields of communication and media (production) studies.

Platform Evolution

An analytical challenge that cuts across all contributions is the issue of institutional contingency, that is, both cultural producers becoming "platform-dependent" and cultural Nieborg et al. 5

commodities being open to constant revision, redesign, and redistribution (Nieborg & Poell, 2018). Karin van Es and Thomas Poell probe how Dutch public service media's mandate to promote public values is beset by difficulty amid the platformization of content distribution. Combining document analysis with 15 in-depth interviews, van Es and Poell explore how stakeholders make sense of this fraught process. Their research shows that as long as there is no consensus on how to anchor public values in a platform environment, public service media will be unable to address the challenges posed by the platformization of cultural production.

The aforementioned contribution by Tamara Kneese and Michael Palm considers the digital vintage economy. As their article makes clear, a physical legacy infrastructure consisting of brick-and-mortar shops, flea markets, and thrift shops is both complemented by and increasingly competing against new digital marketplaces and associated services. They argue that platforms ushered in a new form of labor they dub as "listing labor," or the tasks and responsibilities associated with managing inventory, sales, shipments, and promotion of vintage goods via digital storefronts. When becoming platform-dependent, merchants of vintage products not only have to reorient their sales practices to negotiate the gendered and racialized imaginaries of the vintage subculture, but they also have to constantly adapt to the institutional changes wrought by various platforms and apps. This intensification, which requires more toil, more responsibilities, and more visibility, is taking on a heightened relevancy against the continued ascent of online shopping.

One of the institutional roots of platform evolution is the contingency of platform infrastructures and the governmental frameworks that determine the operation of platforms (Helmond et al., 2019). The article by Jeremy Morris discusses how stakeholders in Spotify's platform economymost notably artists and labels-take advantage of the contingent nature of digital cultural commodities by seeking ways to optimize their music. They do so through a combination of "sonic optimization," "(meta)data optimization," and "infrastructural optimization," which taken together result in "platform effects." Similar to Prey, Morris is careful to point to the music industry's rich history of optimizing songs and sounds. Ultimately, practices that are an artifact of platform evolution—optimizing, resisting, or just simply understanding new regimes of visibility and how stakeholders "game" algorithms—are all issues of deep concern to media industry scholars (Bishop, 2020; O'Meara, 2019; Petre et al., 2019).

Platform Geographies

With dominant platform companies—especially the reigning foursome of Google, Apple, Facebook, and Amazon—all headquartered on the US west coast, questions about the nexus of culture-power-geography—including concerns about cultural colonialism—have taken on a heightened urgency. So, too, has the need for a more robust understanding of

non-US-based platforms—a challenge which a number of contributors have responded to by studying such European companies such as Soundcloud (Hesmondhalgh et al., 2019) and Spotify (Bonini & Gandini, 2019; Morris; Prey). In addition, various papers explore non-English-speaking communiengaging with platform companies, such Spanish-speaking booktubers (Tomasena, 2019); Arriagada and Ibáñez' explorative perspective on the interpretive processes of Chilean content creators; and Kim and Yu's (2019) analysis of Webtoon creators in South Korea. Other articles, such as Duguay's (2019) study of Instagram and Vine creators, benefit from the enlistment of international informants in Australia, Canada, Thailand, and the United States. Suffice to say, these recruitment and interview strategies would have been much more challenging just two decades ago.

Meanwhile, the intervention by Marc Steinberg highlights the historical and geopolitical lineages of platform economics and platform evolution. In his study of the growth of the LINE "super app"—developed in Japan, owned by the South Korea-based Naver Corporation, and popular in East Asia-Steinberg pushes back against a common tendency to bifurcate platform geographies into two segments—one United States, the other Chinese. Instead, through a detailed study of (virtual) stickers in the LINE app, Steinberg demonstrates how a platform company formats content, markets, and producer subjectivities. To be sure, the LINE app is not a site of resistance against global capitalism, nor can it be seen as an "alternative platform" such as Bandcamp or Soundcloud in the music industry (Hesmondhalgh et al., 2019). Rather, Steinberg argues that LINE is a "subdominant," or "a regional player parlaying regional particularities and cultural soft power into local tech dominance."

With the resurgence of the global Black Lives Matter protests in early June 2020 and the anti-Chinese stereotyping and xenophobia linked to the global spread of COVID-19, there is a pressing need for research agendas that foreground platforms, identity, and inequality. The article by Samantha Close and Cynthia Wang, which examines Etsy's crafting subculture, helps to respond to this need through a study that spotlights racist sentiments on a platform that is more widely known for its culture of community and creativity. Bringing discourse analysis of online posts on Reddit together with ethnographic interviews and surveys of crafters, they highlight stereotyping and racial bias directed toward East Asian or Chinese crafters who were the target of blame for the "troubles actually driven by platformization in a world driven by extreme economic inequality." In other words, as is too often the case, deep structural inequalities get cast as individual problems—with individual solutions.

Conclusion

Both individually and holistically, the 26 articles have helped us to get closer to answering the guiding question of whether or not research on platforms requires an overhaul of existing 6 Social Media + Society

tools, methods, and approaches. Collectively, they demonstrate the enduring relevance of mixed-methods approaches, of qualitative methods, interviews in particular, and the importance of being able to embed oneself as a long-term inhabitant of online communities. Platforms also bring with them novel institutional dilemmas such as grasping complex markets, rampant contingency, and the tension between the local and the global. In his op-ed, Eric Schmidt asks a question on the mind of many a politician scrambling to disperse funds: "How could the emerging technologies being deployed in the current crisis propel us into a better future?" When policy-makers are looking for infrastructural projects to invest in, apps to develop, and markets to be re-envisioned, let it be known that we do have answers and approaches to plot a way forward. This future may be platform dependent, but this can be done in a way, as Aymar Jean Christian, Faithe Day, Mark Díaz, and Chelsea Peterson-Salahuddin make clear, that anchors public, intersectional values, particularly solidarity, by connecting, working with, and engaging disparate communities.

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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References

- Bishop, S. (2020). Algorithmic experts: Selling algorithmic lore on YouTube. *Social Media* + *Society*, 6(1). https://doi.org/10.1177/2056305119897323
- Bonini, T., & Gandini, A. (2019). "First week is editorial, second week is algorithmic": Platform gatekeepers and the platformization of music curation. *Social Media+ Society*, *5*(4). https://doi.org/10.1177/2056305119880006
- Bucher, T., & Helmond, A. (2018). The affordances of social media platforms. In J. Burgess, A. Marwick, & T. Poell (Eds.), *The Sage handbook of social media* (pp. 233–253). SAGE.
- Cunningham, S., & Craig, D. (2019). Creator governance in social media entertainment. *Social Media* + *Society*, *5*(4). https://doi.org/10.1177/2056305119883428
- Duffy, B. E. (2017). (Not) getting paid to do what you love: Gender, social media, and aspirational work. Yale University Press.
- Duffy, B. E., Poell, T., & Nieborg, D. B. (2019). Platform practices in the cultural industries: Creativity, labor, and citizenship. *Social Media + Society*, 5(4). https://doi. org/10.1177/2056305119879672

Duguay, S. (2019). "Running the numbers": Modes of microcelebrity labor in queer women's self-representation on Instagram and Vine. *Social Media* + *Society*, 5(4). https://doi.org/10.1177/2056305119894002

- Foxman, M. (2019). United we stand: Platforms, tools and innovation with the unity game engine. *Social Media+ Society*, *5*(4). https://doi.org/10.1177/2056305119880177
- Gerlitz, C., Helmond, A., Nieborg, D. B., & van der Vlist, F. N. (2019). Apps and infrastructures—A research agenda. Computational Culture: A Journal of Software Studies, 7. http://computationalculture.net/apps-and-infrastructures-a-research-agenda/
- Gill, R., & Pratt, A. (2008). In the social factory? Immaterial labour, precariousness and cultural work. *Theory, Culture & Society*, 25(7–8), 1–30.
- Helmond, A., Nieborg, D. B., & van der Vlist, F. N. (2019). Facebook's evolution: Development of a platform-as-infrastructure. *Internet Histories*, *3*(2), 123–146.
- Hesmondhalgh, D. (2019). *The cultural industries*. SAGE. (Original work published 2012)
- Hesmondhalgh, D., Jones, E., & Rauh, A. (2019). SoundCloud and Bandcamp as alternative music platforms. *Social Media* + *Society*, 5(4). https://doi.org/10.1177/2056305119883429
- Hissong, S., Wang, S. H., Amy, X., Millman, E., & Wang, A. X. (2020, April 15). The week the music stopped. *Rolling Stone*. https://www.rollingstone.com/pro/features/music-crisis-concerts-tours-980968/
- Holt, J., & Perren, A. (2019). Media industries: A decade in review. In M. Deuze & M. Prenger (Eds.), *Making media: Production, practices, and professions* (pp. 31–44). Amsterdam University Press.
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276.
- Johnson, M. R., & Woodcock, J. (2019). "And today's top donator is": How live streamers on Twitch.tv Monetize and Gamify their Broadcasts. *Social Media + Society*, 5(4). https://doi.org/10.1177/2056305119881694
- Kim, J.-H., & Yu, J. (2019). Platformizing webtoons: The impact on creative and digital labor in South Korea. *Social Media+Society*, 5(4). https://doi.org/10.1177/2056305119880174
- Lee, D., & Zoellner, A. (2019). Media production research and the challenge of normativity. In M. Deuze & M. Prenger (Eds.), *Making media: Production, practices, and professions* (pp. 45–59). Amsterdam University Press.
- Levy, S. (2020, March 20). Has the coronavirus killed the techlash? *Wired*. https://www.wired.com/story/plaintext-has-the-corona-virus-killed-the-techlash/
- Light, B., Burgess, J., & Duguay, S. (2018). The walkthrough method: An approach to the study of apps. New Media & Society, 20(3), 881–900.
- Lin, J., & de Kloet, J. (2019). Platformization of the unlikely creative class: Kuaishou and Chinese digital cultural production. Social Media+ Society, 5(4). https://doi.org/10.1177/20563 05119883430
- Luo, M. (2020, March 29). The fate of the news in the age of the coronavirus. The New Yorker. https://www.newyorker.com/ news/annals-of-communications/the-fate-of-the-news-in-theage-of-the-coronavirus

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Nader, L. (1969). Up the anthropologist: Perspectives gained from studying up. In D. Hyms (Ed.), *Reinventing anthropology* (pp. 284–311). Random House.

- Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New Media & Society*, *20*(11), 4275–4292.
- O'Meara, V. (2019). Weapons of the chic: Instagram influencer engagement pods as practices of resistance to Instagram platform labor. *Social Media+ Society*, 5(4). https://doi.org/10.1177/2056305119879671
- Petre, C., Duffy, B. E., & Hund, E. (2019). "Gaming the system": Platform paternalism and the politics of algorithmic visibility. *Social Media+ Society*, 5(4). https://doi.org/10.1177/2056305119879995
- Plantin, J-C., & Punathambekar, A. (2019). Digital media infrastructures: Pipes, platforms, and politics. *Media, Culture & Society*, *41*(2), 163–174.
- Schmidt, E. (2020, March 27). A real digital infrastructure at last. *The Wall Street Journal*. https://www.wsj.com/articles/a-real-digital-infrastructure-at-last-11585313825
- Stoppard, L. (2020, May 28). Influencers lose their gloss. *Financial Times*. https://www.ft.com/content/c35ca1d6-9c3e-11ea-871b-edeb99a20c6e
- Sullivan, J. L. (2016, December 1). Researching the internet industries: Strategies and methods. *Culture Digitally*. http://culture-digitally.org/2016/13/studying internet industries/
- Sullivan, J. L. (2019). The platforms of podcasting: Past and present. *Social Media + Society*, 5(4). https://doi.org/10.1177/2056305119880002

- Tomasena, J. M. (2019). Negotiating collaborations: BookTubers, The publishing industry, and YouTube's ecosystem. *Social Media+ Society*, 5(4). https://doi.org/10.1177/205630511989 4004
- Tsapovsky, F. (2020, April 14). Could the coronavirus kill influencer culture? Wired. https://www.wired.com/story/coronavirus-covid-19-influencers/
- Weiss, B. (2020, May 25). Joe Rogan is the new mainstream media. The New York Times. https://www.nytimes.com/2020/05/25/ opinion/joe-rogan-spotify-podcast.html
- Weltevrede, E. (2016). Repurposing digital methods: The research affordances of platforms and engines (Doctoral Thesis). Universiteit van Amsterdam.

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