Intermediaries in the age of platformized gatekeeping: The case of YouTube "creators" and MCNs in the U.S.

Michael L. Siciliano

Tulane University, United States

ARTICLE INFO

ABSTRACT

How do intermediaries affect cultural production in the age of platformized gatekeeping? Cultural production increasingly depends upon digital infrastructures known as platforms (e.g., Twitter, YouTube, Facebook, Instagram, Google, et al.) for distribution. These infrastructures supposedly diminish the importance of conventional, non-infrastructural intermediaries, yet cultural production's platformization occurred alongside the emergence of new downstream intermediaries. Here, I show how the practices of YouTube content creators reflect direct instructions from both the platform (primary gatekeeper) and a downstream intermediary (an MCN). *Producers no longer require non-platform intermediaries for access to markets, and so, rather than acting as gatekeeper, non-platform intermediaries support the platform. The MCN aids the platform by propagating platform conventions and an orientation toward metrics and algorithms among content producers.* This differs markedly from conventional sociological theories of cultural production which presume intermediaries as autonomous organizations that reproduce and mediate social conventions of cultural production (i.e., genre, roles, etc.). Thus, under conditions of platformization, both intermediaries and producers appear subordinate to infrastructure.

1. Introduction

Whether news, music, video, photographs, or digital missives, cultural production is increasingly embedded within the privately owned digital media infrastructures that we call platforms (e.g., Twitter, YouTube, Facebook, et al.). However, prominent sociological theories of cultural production (e.g., Becker, 1982; Bourdieu, 1993; Hirsch, 1972) tend to ignore infrastructure[1] despite widespread attention to infrastructure in cultural and economic sociology (e.g., Bowker & Star, 2000; Edwards et al., 2009; Star & Ruhleder, 1996; Timmermans & Epstein, 2010) as well as related fields (e.g., Acland et al., 2015; Anand et al., 2018; Hetherington, 2018; Hockenberry et al., 2021; see Hesmondhalgh, 2021 for critical review). Instead, key sociological theories of cultural production continue to focus attention on conventional gatekeepers and other intermediaries as in recent studies of book publishing, record labels, and talent agents (e.g., Arditi, 2020; Childress, 2017; Roussel, 2017). Social media platforms such as YouTube offer opportunities for distributing cultural products to audiences, ostensibly diminishing the power of the intermediaries highlighted in Hirsch's "organization set"

---

analysis (1972), Bourdieu's "fields of cultural production" approach (1993), and Becker's "art worlds" (1982).

Due to platformization, downstream intermediaries no longer hold sway as crucial gatekeepers (Nieborg & Poell, 2018; Nielsen & Ganter, 2022; Poell et al., 2021), yet, puzzlingly, new downstream intermediaries emerged with the rise of platforms. *How do downstream intermediary organizations mediate, support, or challenge platforms' power?* Focusing on how the platform and intermediary impact content producers' practices, I show how downstream intermediaries extend platforms' gatekeeping power by propagating an orientation among content producers toward platforms' governance (metrics, algorithms, etc.) and platform conventions. Less frequently, MCNs mediate YouTube's power, especially in copyright and payment disputes.

As noted by social media scholars, content producers who seek fame and economic success develop an orientation focused on algorithmic and metric success (Caplan & Boyd, 2018; Duffy et al., 2019; Nieborg & Poell, 2018; Poell et al., 2021; Duffy, 2017; Siciliano, 2021a), often relying on "algorithmic lore" from other producers (Bishop, 2020) to make sense of the platform's governance. In contrast, I show how the platform directly provides formatting tips and advice rather than "lore." The MCN reinforces this advice and so *the metric orientation observed among content producers stems from micro-interactions between content producers, the platform and its interface, and intermediary organizations.* These actions by MCNs and platforms facilitate exploitation of un(der)paid labor from a globally distributed workforce (Siciliano, 2017; 2021a; 2021b; see also Scholz 2013; Terranova, 2000)).

I base my claims on 10 months of ethnographic fieldwork and 46 interviews with content producers, executives, managers, and staff at a social-media intermediary organization (Cunningham & Craig, 2019) in the United States. Of course, due to my methodology, my findings may not generalize to all content producers, however, my findings may prove conceptually useful in examining other cases of intermediary-affiliated content producers who seek fame and economic success.

I first briefly discuss conventional theories of cultural production. These theories prove quite useful in understanding cultural production when autonomous gatekeepers progressively winnow field entrants and when production occurs separate from distinct and diffusely owned institutions where gatekeeping, distribution, and valuation or "consecration" occur (Becker, 1982; Bourdieu, 1993; Childress, 2017; Hirsch, 1972). Platformized cultural production, however, fails to meet these common theoretical assumptions. I then show how social media research and platform studies properly shift attention toward infrastructure, yet offer little in the way of explaining the emerging roles of intermediaries under conditions of supposedly unmediated platformized production. I then discuss data collection, case selection, and the institutional and infrastructural context of YouTube production.

I then present my data, starting with the production practices of content producers managed by the MCN where I conducted primary fieldwork. I show how these intermediary affiliated content producers follow (1) formating advice given by the platform itself and (2) similar advice given by the intermediary organization. To show how producers' orientation and practices stem from interactions with both the platform and the MCN, I then examine producers' points of contact with the platform: the platform's interface and the platforms' production guidelines. I then move from the practices of producers to the intermediary's offices to illustrate how producers' practices emerge from a complex entanglement of infrastructure, producers, and intermediaries. Unlike conventional intermediaries that reproduce genre conventions and production roles, the MCN propagates platform conventions and an orientation toward the platforms' metrics and algorithms. I conclude by discussing my findings' implications for studies of cultural production and work.
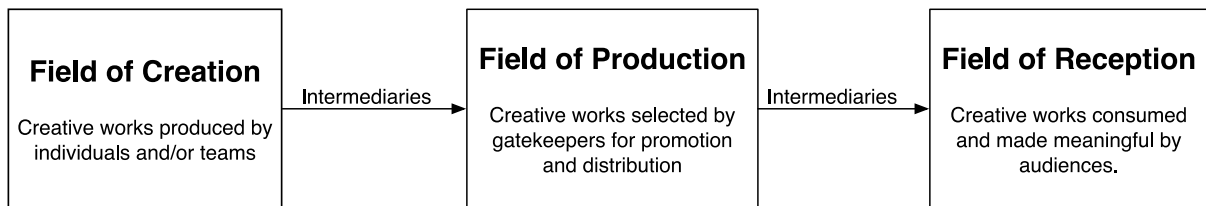
2. An absent (infra)structure in the production of culture

Given the primacy of platforms as infrastructural gatekeepers, how, if at all, do downstream, platformized intermediary organizations structure cultural production? Addressing this question requires, first, an understanding of gatekeeping intermediaries in conventional cultural production. Conventional intermediaries exist independently of producers and distributors—what Hirsch, following organizational sociologists, called the "organization set" (Hirsch, 1972). Conventional intermediaries reproduce genres, roles, and other production conventions (Bechky, 2006; Mears, 2011; Roussel, 2017; Hesmondhalgh, 2019; Negus, 2002; Toynbee, 2016). Producers tend to orient toward these intermediaries when seeking distribution and, with any luck, success (Hirsch, 1972; 2000).

Hirsch developed his model of cultural production to explain mass cultural production processes (e.g., 20th century publishing, music, film, and television). This model presumes cultural producers or "creators" to be dependent upon "autonomous agencies (especially mass-media gatekeepers) for linking" producers to audiences or "customers." Hirsch's model focuses attention upon the network or "organization set" in which cultural production is embedded (Hirsch, 1972, 641), yet the "organization set" does not include infrastructure. In this model, cultural products flow from producers (e.g., musicians, artists, authors, filmmakers, etc.) to a series of intermediaries and then on to the market where consumers do or do not purchase said products.

This model's fundamental assumption is met in many studies of cultural production and creative work such as Mears's research on modeling agencies in fashion (Mears, 2011), Childress (Childress, 2017) on book publishing, Bourdieu (Bourdieu, 1993, 1996) on fine art , and Rossman (Rossman, 2012) on radio. In these studies, producers tend to orient their practices to stated or tacit criteria by which intermediaries or gatekeepers ("surrogate consumers") winnow the number of entrants into the market for cultural products, thus limiting the number of creative works available to consumers.

Being selected or gaining approval from gatekeepers leads to increased market access and may include praise from critics or awards-giving institutions (e.g., the Record Academy's Grammy or the Academy of Motion Picture Arts's Oscar). Approval from these gatekeepers results in heightened status—what Bourdieu termed "consecration" (Bourdieu, 1993). Per Bourdieu, intermediaries such as critics and consecrating institutions that bestow symbolic value upon creative works independent from economic value form a necessary condition for the autonomy of cultural fields vis-à-vis other fields such as the economic or political fields. This condition allows for the imposition of "an autonomous definition of properly artistic value irreducible to strictly economic value" (Bourdieu,

Field of Creation		Field of Production		Field of Reception
Field of Creation Creative works produced by individuals and/or teams	Intermediaries →	**Field of Production** Creative works selected by gatekeepers for promotion and distribution	Intermediaries →	**Field of Reception** Creative works consumed and made meaningful by audiences.

(see Childress 2017; Hirsch 1972; Bourdieu 1993)

Fig. 1. Conventional Structure of Cultural Production.

1993, 260).

In these models, conventional intermediaries tend to perform two functions: gatekeeping and reproducing conventions (e.g., genre, styles, and roles). As Hirsch noted, conventional intermediaries mediate consumption and production as gatekeepers, winnowing down the number of aspiring cultural producers and products. Concurrently, intermediaries "format" cultural products to fit existing genre categories or other market categories (Hesmondhalgh, 2019). These two processes, are, of course, interrelated. For example, talent agents attempt to fit actors within types legible to casting directors (Roussel, 2017) just as modeling agents attempt to shape models into established "looks" (Mears, 2011). Music intermediaries such as record labels and radio stations attempt to fit musicians within established genres and "authentic" styles (Holt, 2007; Peterson, 1997; Rossman, 2012) just as intermediaries in publishing and television frame new products in relation to past successes within clearly defined genres and roles (Bielby & Bielby, 1994; Childress, 2017).

The model of cultural production below (Fig. 1) suggests two expectations for empirical research.[2] *First, one expects distinct and autonomous gatekeepers who winnow the number of participants in a field and who urge participants to conform to existing genres, roles, or market categories.* Platformed production, relatively open with drastically lowered barriers to entry, does not meet this theoretical expectation. *Second, and following from the first, this model suggests that the practices of cultural producers and thus cultural products tend to be shaped by gatekeepers to the degree by which cultural producers depend upon said gatekeepers for market access and status.*

Hirsch's basic model undergirds studies in much of the sociology of culture such as the "production" tradition (see Peterson, 1994; Peterson & Anand, 2004) as well as the related "fields of cultural production" (Bourdieu, 1993; 1996) and "art worlds" (Becker, 1982) approaches. These three mainstays of cultural sociology implicitly assume that cultural products flow through distinct institutional or organizational domains—Hirsch's "autonomous agencies" connecting cultural producers, distributors, and consumers. This model rightly points us to interactions between each link in the network of actors from producer to consumer, however, applying this model to platformized production leaves cultural sociologists with little to say.

Platformized production does not depend upon distinct, autonomous gatekeepers for consecration or rewards. Instead, infrastructure performs these functions, acting as gatekeeper, consecrator, and, in some cases, remunerator as production and consumption come to be embedded within platforms. Unlike conventional gatekeepers, platforms encourage increased participation, rarely winnowing producers, while also granting rewards to which producers orient (e.g., payment and consecration). Hirsch's model which underpins much research on cultural production, suggests that platforms may have an inordinate impact on creative work(s), but leaves us with little means to apprehend or bear witness to this effect.

How can we observe interactions between gatekeepers and producers when, per Langley & Leyshon (2017), much contemporary intermediation and gatekeeping occurs at the level of infrastructure? At the same time, new intermediaries arose such as digital talent managers and multi-channel or multi-platform networks (Cunningham & Craig, 2019). How do these downstream intermediaries shape cultural production? To study platformized cultural production, sociologists need ask both how platforms perform gatekeeping at the micro-interactional level while continuing to ask how interactions between non-infrastructural intermediaries and producers shape culture. To do so, the sociology of cultural production (i.e., "production of culture," "art worlds," and "fields of cultural production" literatures) must incorporate key insights from studies of infrastructure in the sociologies of classification, work, and organizations as well as media studies. As I show below, these literatures in platform studies provide inroads to understanding platforms' gatekeeping, yet provides less insight into how downstream intermediaries (e.g., management organizations, talent agencies, casting agencies, etc.) interact with platforms and producers.

3. Platforms' permissive power

Platforms tend to exert "permissive" and "generative" power, governing through affordance and invitation rather than strict prohibition or exclusion (Nielsen & Ganter, 2022; Siciliano, 2021a, 2016; Vallas & Schor, 2020). Diverse areas of social life are increasingly embedded within these digital infrastructures (see, e.g., Ananny, 2016; Beer, 2009; Bucher, 2012; 2018; Corporaal & Lehdonvirta, 2017; Curchod et al., 2020; Duffy et al., 2019; Geiger, 2017; Morris, 2020; Nieborg & Poell, 2018; Orlikowski & Scott, 2015; Siciliano, 2016; Srnicek, 2016). Platforms function as intermediaries between two or more actors that enable those actors to coordinate production or render services (Srnicek, 2016). Web and application-based platforms represent a specific kind of digital

---

[2] Fig. 1 draws from Hirsch's original diagram (1972) as well as more recent, updated versions presented by Rossman (2012) and Childress (2017).

infrastructure—often centrally designed and controlled by their owners (Plantin et al., 2016). Web and app-based platforms' centralized ownership and operation differs from infrastructures developed with input from multiple stakeholders such as the state or professional associations as in classification systems (Bowker & Star, 2000; see also, Timmermans & Epstein, 2010). Thus, digital platforms tend to be subject to rapid change initiated by infrastructure's owners (Gillespie et al., 2014), something obfuscated by owners' purposeful ambiguity in using the term "platform" to denote openness, opportunity, and immediacy (Gillespie, 2010).

Much as conventional cultural producers oriented toward conventional gatekeepers, platformized cultural producers develop practices in relation to rapid changes in platforms' algorithms, interfaces, and governance—the infrastructural elements of platforms remain opaque to users and downstream, platformized intermediary organizations (Duffy et al., 2019; Nieborg & Poell, 2018; Poell et al., 2021; Siciliano, 2021a). The coeval emergence of practices vis-à-vis platforms leads scholars to theorize the impact of platforms as socio-material or socio-technical—an entanglement of material or technical elements and social actors (Orlikowski, 2007; see also Nielsen & Ganter, 2022). Thus, causality becomes difficult to pinpoint, leaving sociologists, instead, to trace the complex assemblage of human and non-human actors – a point well made by proponents of "actor-network theory" (Latour, 2007) as well as sociologists (Wajcman, 2006) and organizational scholars (Orlikowski, 2007). More precisely, these scholars conceptualize digital platforms as what Nigel Thrift (Thrift, 2005) calls "performative infrastructures," continually updating and shifting, acting upon and constituting those who use or otherwise engage with platforms (see also, Beer, 2009; Orlikowski & Scott, 2015).

Platforms exert this constitutive or "generative" power by way of their algorithms and governance systems—what Orlikowski and Scott call "increasingly powerful and active technological environments that operate without the knowledge of those upon whom they are taking an effect." For this reason, I elsewhere argue that sociologists of work must extend their focus "beyond the community, the state, the organizational field … to the ever-evolving, dense socio-technical networks of infrastructures and human actors in which contemporary work is embedded" (Siciliano, 2016, 148; see also Siciliano, 2021a).

Sociologists of cultural production must follow organizational and work scholars in extending beyond the organization set model that undergirds theories of cultural production to consider the constitutive power of infrastructures. *Such a turn toward infrastructure shifts sociologists of cultural production away from asking how a particular technology "causes" cultural change at the level of organizational fields or individual actors (e.g.,* Anand & Peterson, 2000*), but to, instead, consider micro-level practices in dynamic relation with platforms' materiality (interfaces) and unseen algorithms, metrics, and governance.* For example, Bucher (2012) argues that Facebook's users develop a distinct participatory subjectivity in relation to the platform's algorithms. This, Bucher claims, demonstrates how "algorithmic architectures dynamically constitute" social practices. For example, Facebook users develop practices by which they hope to become visible to both peer-users and broader audiences. Insofar as the platforms' algorithm helps determine public visibility, users' practices of self-expression develop in ways that mirror the logic of the platform's algorithm.

Similarly, Ananny (2016) shows how algorithms (1) bring users together as a collectivity oriented around similar information, (2) limit users' options for action to that which can be detected by a platform's algorithm, and (3) structure the rhythms by which users expect to consume as in the ebb and flow of "trending" videos, topics, and other information on platforms such as Twitter, Facebook, and YouTube. Algorithms govern users' visibility to each other as well as myriad audiences and emergent publics, and so platforms "see" all without every truly being "seen," remaining mostly infrastructural and blackboxed to downstream users (Bucher, 2018; see also, Pasquale, 2015). Yet, drawing upon Foucault (2012 [1977]), Bucher argues platforms' panopticism disciplines users insofar as platforms contain "hierarchical observation, normalizing judgement and examination" (Bucher, 2012, 1175).

Changes in algorithms, along with other infrastructural changes, carry the very real threat of making cultural products invisible to intended audiences. For casual platform users, this presents a problem of interpersonal communication, but for those who use platforms to earn a living, platforms' blackboxed, infrastructural power directly threatens one's livelihood just as it does for workers on other work platforms (c.f., Rosenblat, 2018; Vallas & Schor, 2020). Potential invisibility vis-à-vis the platform (and thus audiences) tends to result in increased use among content producers as they struggle to understand algorithms and associated metrics (Bucher, 2012; Siciliano, 2021a).

Platforms structure production through algorithmic governance, metrics, and piece-rate reward structures, all of which occur within production at the level of infrastructure, rather than in separate "fields" or organizations presumed by Hirsch, Bourdieu, and Becker. Caplan & Boyd (2018) argue that this may lead to homogeneity in cultural products as workers produce to meet demands set forth by platforms resulting in what Nieborg & Poell (2018) call the "contingency" of platformized cultural production. Nieborg and Poell speculate that as cultural production becomes fully platformized, cultural producers develop practices intended to produce modular cultural products intended to be modifiable dependent upon changes in platforms' infrastructural elements. Anecdotal evidence presented by Morris (2020) supports this line of argument with a few "extreme" cases that highlight how musicians tailor their songs for Spotify's algorithms, optimizing their "content" to meet to be better legible to infrastructure. These practices included creating "fake" songs that sound like popular songs and by "gaming" titles, images, and other metadata to better suit the platform's algorithm. Here, platforms take over gatekeeping through their algorithms and, less often, human curation of content (Bonini & Gandini, 2019), further suggesting culture's contingency upon infrastructural context. Culture thus comes to more closely resemble the structures from which it emerges, even more so than in previous eras marked by media consolidation as in classic studies of market diversity (i.e., Dowd, 2004; Lopes, 1992; Peterson & Berger, 1975).

Though platform studies tell us much about *platforms* in platformized cultural production, significantly less attention has been paid to multi-sided relations between platforms, content producers, *and* platformized intermediary organizations. As platforms take on the role of gatekeeper, distributor, and remunerator for cultural production, how do downstream intermediaries mediate platforms' supposed immediacy?

4. Case selection and data collection

As one of the largest and longest-running social media platforms that distributes user-generated content since 2005 to a current global audience of over 1 billion users, YouTube serves as an ideal case in which to examine platformized intermediaries and content producers. In this case, a single platform appears coterminous with the field – something I discuss later when providing a history of the field. My analysis draws from 10 months of participant observation inside a multi-channel YouTube network (MCN) along with 46 in-depth semi-structured interviews with managers, employees, and "creators" within the network. As a "social media intermediary" (Cunningham & Craig, 2019), the MCN resembles a hybrid of several conventional intermediary types, providing both talent management and distribution services for over a thousand YouTube content creators.

I entered the MCN for 10 months as an unpaid intern in 2015 working three days from 10:00 am–6:00 pm alongside the company's talent management team. I then spent an additional six months interviewing creators across the U.S. for a total of 46 interviews. At the MCN, I regularly attended full staff meetings, network development meetings, and strategy meetings while regularly conducting "optimization" reports and generating recommendations for my team in the MCN as well as direct outreach to prospective creator-clients. Additionally, I attended the annual YouTube industry conference VidCon in 2015 and 2018.

I interviewed co-workers, supervisors, and executives (see Appendix A) as well as creators managed by the MCN. I selected creators based on years spent on the platform, audience size, genre, and geographic location (see Appendix B). I used audience size as a proxy for success because audience size tends to be closely correlated with earnings, however, the relationship between audience size and income tends to be unstable. As described later, creators' pay rates vary quite dramatically from minute-to-minute. As a measure of audience size, I used total subscribers to a creator's channel rather than total video views because subscribers actively choose to follow creators and thus suggest more sustained success. The audience size of creators represented by the MCN ranged from 0 – 8360,000 along a "superstar" distribution typical of culture industries *and* platforms (Caves, 2000; Rosen, 1981; Zysman & Kenney, 2014). The distribution of subscribers among those interviewed resembles this broader pattern with audience size ranging from 35 to 1780,000.

Creators tend to produce content in their homes and so I visited these home studios in the Midwest, Southwest, and West United States. While traveling across the US, I conducted in-depth, semi-structured interviews that ranged from 45 to 120 min in length. I also conducted video call interviews with creators located in the Northwestern and Eastern U.S as well as Western Europe. In addition to geographic diversity, I attempted to gain maximum variation among content creators along demographic variables (i.e., age, gender, and race/ethnicity), popularity, earnings, and genre. Genre plays a key role in structuring cultural production and, by extension, creative labor (Finnegan, 1989; Hesmondhalgh & Baker, 2011; Holt, 2007; Negus, 1999) and so I sought out interviews from creators producing vlogs (video blogs), videogame related content, animation, comedic content (short sketches, prank videos), news, flying drone footage, music videos, tutorials, stunts/martial arts videos, magic videos, experimental art videos, and promotional content paid for by various brands. Insofar as producers in each genre compete for similar resources (e.g., views and other metrics and awards devised by YouTube, brand sponsorships, etc.), they inhabit the same field (Bourdieu, 1993; 1990).

I extend outward from my ethnographic data to consider the broader context in which my fieldwork is situated and, ultimately, to extend theory (Burawoy, 1998). This included examining previous research discussed above alongside news reporting and popular writings on social media and YouTube production, and a "walkthrough" of the platform. As described by Light et al. (2018), a platform walkthrough includes consideration of the platform's user interface along with its functions and features, textual content and its tone (e.g., instructions and other guides), and symbolic representations (e.g., logos, advertisements, non-functional design elements, etc.). By extending to the structures in which my fieldsite was embedded, I explain how YouTube's platformized production differs from extant models and thus how the platform and downstream organizations shape cultural production. Of course, all ethnographic and interview research sacrifices the breadth of statistical generalizability for depth and *conceptual* generalizability. Thus, my findings may not be statistically generalizable, but my *analysis* may prove conceptually useful in other contexts with similar infrastructural and institutional conditions.

5. Industrial and infrastructural context of YouTube production

Before presenting ethnographic data, I provide background on the industry surrounding YouTube and a brief history of the platform. Like other culture industries (e.g., film, television, and music), digital content production is oligopolistic with major digital media platforms owned by just five firms (GAFAM or Google/Alphabet, Apple, Facebook, Amazon, and Microsoft). As noted in Srnicek's *Platform Capitalism* (2016), platforms depend upon network effects for both financial viability and utility, thus increasing a trend toward centralization of ownership and oligopoly. Production occurs in geographically dispersed settings, often funded by individual creators or small production teams located downstream. As a virtual mode of organizing cultural production, platforms enable high centralization of power while affording autonomy to downstream producers—what Vallas and Schor call "permissive potentates" (2020) in which infrastructure replaces social ties found in conventional culture industries' networked structures (see, Powell, 1990). This virtualization of cultural production appears most clearly among "social" platforms such as YouTube that rely upon user-generated content rather than the vertically integrated production at Netflix and AmazonVideo which more closely resembles conventionally networked production.

Notably, YouTube represents one of the few global platforms that both depends upon user-generated content *and* provides direct payment to users for said content. Rather than the socially networked organization seen in conventional media industries, YouTube production is embedded within the platform's infrastructure. This virtual production network consists of a billion "users" that include professional, semi-professional, and amateur content creators. Though often characterized as "participatory" media (see, e.g., Burgess et al., 2009; Jenkins, 2006), YouTube began to pay content creators in the late 2000s and thus transformed a user/platform relation

into a freelance employment relation between YouTube and its digital laborers (see Scholz 2013). Creators earn variable piece rates based on audience size ranging from $1 to upwards of $20 per 1000 views ($0.001 to $0.02 cents per view). By 2011, YouTube content production had grown quite profitable for content creators with an ever-growing number of professional creators. Like other culture industries and other platformized occupations, creators' views and earnings tend to follow a "superstar" distribution indicative of a "winner-take-all" labor market with few extreme successes and many failures (Zysman & Kenney, 2014; see also, Rosen, 1981).

From early 2011 until 2016, numerous multi-channel networks and other downstream organizations sprang up to mediate and manage relations between creators and the platform. Dubbed the new digital Hollywood or "HollyTube" (Wallenstein, 2012), MCNs manage creators and mediate creators' relationship with the platform while taking advantage of YouTube's low-cost, crowd-sourced production in the management and distribution of content. MCNs exist in various locations worldwide with most North American MCNs concentrated in Hollywood and West LA's "Silicon Beach" – a burgeoning technology hub. YouTube and MCNs celebrated creators' "cheapness" during fieldwork, not unlike older media's efforts "*to acquire content for little or no cost and to get everyone to work for free*" (Caldwell, 2008, 324 original emphasis). Global media conglomerates purchased many MCNs from 2013 to 2015 for sums ranging from $100 million to over $300 million (Morrison, 2014). These included Disney's Maker, DreamWorks's AwesomenessTV and BigFrame, AT&T's Fullscreen, Warner Brothers' Machinima, Pro.Sieben's Studio71, and StyleHaul. Since 2017, MCNs declined in popularity, yet remain vital as one of many new "social media intermediaries" (Cunningham & Craig, 2019) that, as I show later, propagate platforms' power over content producers.

YouTube content, by definition, exists within a single platform, one that provides distribution and remuneration infrastructure. This makes creators "platform-dependent" producers (Poell et al., 2021). Though creators may and often do engage with multiple platforms, YouTube content cannot be distributed off platform less it become another platform's content and so, as shown later, producers tend to produce content formated for specific platforms. Additionally, YouTube offers direct remuneration for user-generated content along with a searchable, one-to-many distribution structure, an affordance of the platform that differentiates YouTube from digital video on most social media (e.g., Instagram or TikTok) and messaging platforms (e.g., WhatsApp or Signal). Likewise, YouTube predominantly depends upon user-generated content which differs from streaming services such as Netflix, AmazonVideo, and Hulu. These vertically integrated companies more closely resemble conventional production in film and television industries—directly funding content production and license content from TV networks and film studios (Poell et al., 2021). While YouTube began some initiatives toward funding some creators and providing limited access to production facilities as early as 2011, most creators survive on the platform's piece-rate alongside branded sponsorships, crowdfunding (e.g., Patreon), and other third-party sources of income. Unlike conventional cultural production, YouTube creators lack opportunities for consecration or critical evaluation uncoupled from quantitative success. YouTube grants awards ("Play-Button" trophies) based solely on metrics and other awards (e.g., the Streamy awards) tend to go to winners of YouTube's "Play-Button" awards despite being based on insider voting.

6. Creators' infrastructural orientation

In what follows, I show how platforms and downstream intermediaries shape the practices of content creators and thus shape cultural production. Extant theory suggests that producers' practices reflect algorithms and reward structures and so I first examine the production practices of MCN-managed YouTube creators before examining their point of interaction with the platform (the interface) and then, finally, the actions of the MCN's staff.

YouTubers whom I met during fieldwork performed a variety of production roles, tending to orient toward the platform's governance systems and reward structures. *In line with extant social media scholarship, creators tended to orient to the platform's infrastructural governance and reward structure despite differences in social position and motivation for entering the field* (see, e.g., Caplan & Boyd, 2018; Duffy et al., 2019; Nieborg & Poell, 2018; Poell et al., 2021; Duffy, 2017; Siciliano, 2021a). This differs markedly from sociologists' expectations which were formed under conditions outlined in Hirsch's "organization set" model (Hirsch, 1972) and related "production of culture," "arts worlds," and "fields of cultural production" scholarship in which producers orient, primarily, toward genre (Becker, 1984; Bielby & Bielby, 1994; Finnegan, 1989) or production roles (Bechky, 2006). Later, I show how creators' participation in both platformized and conventional fields mediates this orientation.

Typically, creators work alone: writing, directing, lighting, recording, and editing—thus blurring and diminishing the importance of roles in regulating cultural production. For instance, I met a 20-something white male creator in the rural Midwest who made content about his backyard "science" experiments (e.g., building a "potato gun"). He earned enough from his videos that he only had to work part-time as a landscaper, cutting lawns and trimming hedges to meet his economic needs. He wrote, scripted, shot, edited, and starred in his creative works, toiling in isolation with his production equipment, computer, and countless empty bottles of Powerade for company. A 30-something LA male creator of animated content lived and worked in much the same way.

Though most performed multiple roles, not all lived alone. A 20-something woman in the urban Midwest produced content on a makeshift studio set in her grandmother's living room. Her earnings paid her college tuition. A 50-something man and his children in the Southwestern US created content from a small studio in a small room just off their kitchen. Their YouTube earnings enabled the man to spend more time taking care of the children while his wife worked a full time in the tech sector.

Combining roles associated with conventional cultural production (e.g., writer, director, actor, cinematographer, editor, etc.), creators' production processes included a combination of brainstorming, careful scripting, improvisation, and strategic iteration. A Californian comedian creator illustrates a common style of production focused on one-off, topical videos wherein creators directly address the camera (a "vlog" or video blog). Around 8:00am, he peruses Reddit and Facebook for news stories that he might craft into jokes. "My rule for comedy is that if there's a victim in the situation or if someone's dead, you can't make fun of it." When nothing useful comes up, he phones a friend to "brainstorm a little bit." He finishes his script by 11:00am. He began by deciding on a topic and

then, "Maybe a minimal amount of research and [then] depending on how confident I feel about it, sometimes I'll just go off the top of my head." From set-up to teardown, his shoot takes a little over an hour. He makes sure to include various "calls to action" aimed at increasing his subscriber counts. After he gets a few good takes of his daily monolog and additional shots ("pick-ups" or "inserts"), he transfers the video into editing software.

After editing, he uploads the video to YouTube and creates a thumbnail or preview image intended to attract as many views as possible. YouTube provides guidelines for the design of thumbnails to best attract viewers because creators often make uninformative or outlandish thumbnails. The guidelines illustrate YouTube's attempt to format (Callon, 1998) users' content to meet the expectations of the platform's algorithms, advertisers, and audiences. After uploading his content, he sends out emails to casting companies and corporate sponsors in search of auditions and promotion contracts with global brands. Other vloggers described similar processes.

A creator in the Midwest batches production to meet what he perceived as the demands of YouTube's governance and reward structure (i.e., algorithmic search and the piece-rate payment and view-based award systems). He interviews touring musicians before their performances and on any given night, he shoots interviews with musicians at 2–5 different concerts. When we met, he was starting a 15 h day and readying to shoot one of that night's three scheduled interviews. Earning just a $1000/month, he posts three videos every day of the week. This steady flow of content supports his small channel (80,000 subscribers). To efficiently gather footage, he carries a mobile production rig in a medium-sized backpack containing a shoulder-mounted camera stand, an HD camcorder, a small LED array for illumination, and a "shotgun" microphone. After shooting, he breaks down each interview into three to seven smaller segments to be released separately, thus meeting his 21 videos-per-week production schedule.

All creators with whom I spoke adopted many of the practices advocated by the platform and the intermediary management organization with whom they worked. Rather than focus on genre, as in conventional formating performed by non-infrastructural intermediaries, the platform's advice focuses on content's form, not its themes, with special attention to "proper" videography (e.g., lighting, framing, and editing), creation of promotional materials, "self-branding," digital title cards, and in-video links to their other videos.

Thus, the platform's advice resembles formating or framing processes that define and standardize commodities (i.e., Callon, 1998) rather than genre formating processes found in conventional cultural production. One Midwestern creator explained that he used the platform's data to adjust his content's form. As he said, "I know that I might get one percent [more] views if I put [title or end] cards in or do this or do that, but it just goes back to how there are so many things that you have to do and I'm only me." These "cards" typically contain links to other videos on his channels and automatically cycle viewers to the creator's next video. Most professional YouTubers follow this practice to keep viewers watching videos on their channel. In turn, this practice increases "viewing time"—the metric heralded by YouTube as most important for its search algorithm. Though adding these cards may seem trivial, this change, in the aggregate, results in formal similarities across all YouTube content, a point to which I return later.

7. The engaging platform

To demonstrate how producers' practices and orientation stem from interactions with the platform and, later, the MCN, I now examine producers' first point of contact with the platform: the interface. As argued earlier, creators' platformed orientation requires sociologists to attend to platforms' interfaces, governance, and reward structures alongside creators and intermediaries because cultural production includes a mix of social (human/human) and "post-social" (human/non-human) interactions (Siciliano, 2016, 2021a; see also, Cetina & Bruegger, 2002a). Interfaces provide one way by which platforms engage cultural producers. Thus, I turn to creators' interactions with both the platform's interface and symbolic representations (i.e., advertisements). I approach the latter beginning with YouTube's advertised invitations to users and then move on to discuss the "YouTube Studio" interface.

Across Los Angeles and online, YouTube advertises itself as a platform where users may "Dare to be you" and where "the self-made make it!" These advertisements include images of successful YouTube creators alongside a count of the creators' "subscribers" or active fans. Subscriber counts represent a rough approximation of popularity and platform-derived income insofar as subscribers are positively correlated with video views. Views form the basis for creators' earnings. Already in these advertisements, one finds an association between creative self-expression and metrics.

The interface for the platform's content management system (CMS) or "YouTube Studio" furthers this association, providing a means by which YouTube engages creators (see Fig. 2, above). The most successful creator with whom I spoke (over 1,000,000 subscribers) described the interface as "the best video game … it's electric," a comment suggestive of the micro-effervescence or affective binding associated with technology in creative occupations (Cetina & Bruegger, 2000; Chun, 2005; Kaiser et al., 2007; Siciliano, 2016; 2021a). The CMS interface viscerally engages creators through an evolving, dynamic screen environment, providing embodied engagement and agency circumscribed by the platform. This "studio" interface allows budding creators to begin uploading videos. After uploading a video, creators may access visualizations of their metrics or "analytics" which, like the advertisements above, link metrics and more widespread discourses of entrepreneurialism.

As "scopes" (Cetina, 2009; Cetina & Bruegger, 2002b) or dynamic displays of situation-specific information to which individuals orient, these visualizations shape action as they react to "scoped" information. YouTube's CMS displays video "views" and "minutes-watched" data—the most important metric according to YouTube. Reading from left to right, the interface first displays minutes-watched beside a red or green arrow that indicates decline or growth and a line chart that displays changes during the previous 28 days. Creators can view data in "real-time" with dynamic updates to measures of audience behavior. Next, the interface displays the channel's "average view duration" followed by measures of bulk "views," estimated revenue, and a series of engagement metrics.

Creators may click on each of these to view more detailed information or "dive deep" to learn viewers' geographic location, video
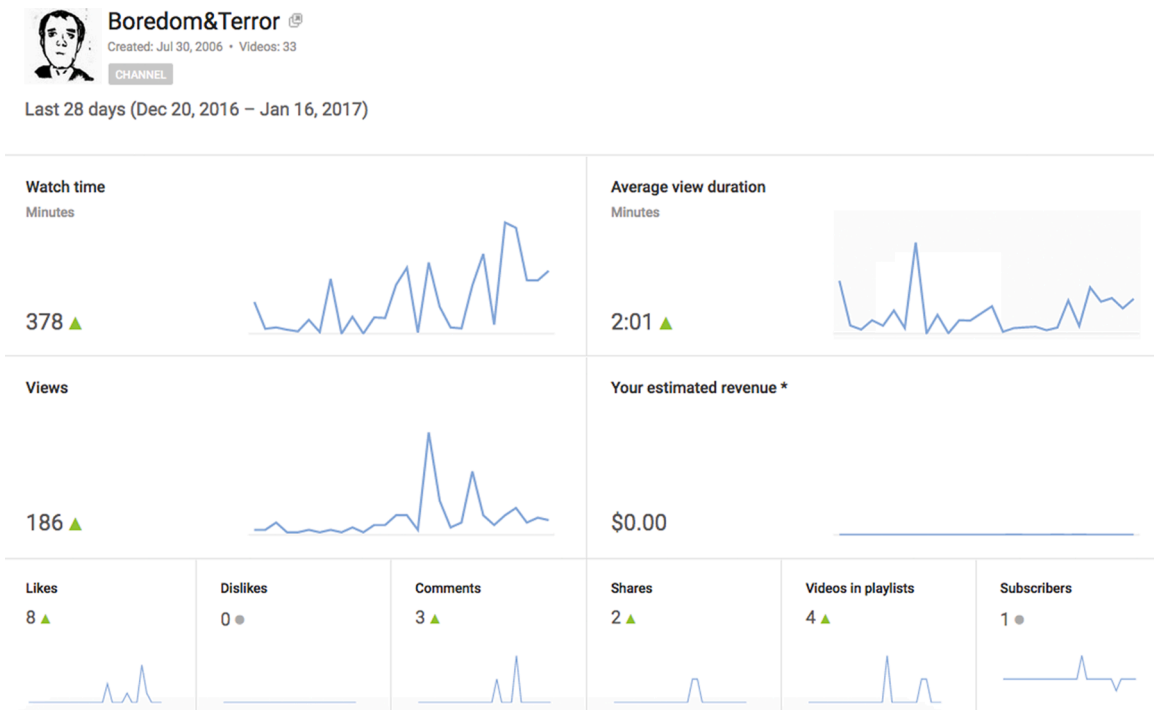
Fig. 2. YouTube Studio interface during fieldwork.

timelines illustrating when viewers stopped watching, and current CPM for the channel. The CMS provides information on audience demographics (e.g., gender, age, language, operating system, and viewing device) along with information about how viewers arrived at the video (search, algorithmic recommendation, or external weblink) and viewing experience (e.g., on the platform's website or embedded in another website). Engagement metrics (i.e., likes, sharing, and commenting) and data describing viewers' computers round out these measures of audience behavior. Among creators, even social interactions tend to be technologically mediated as in emails and comments from viewers (see, e.g., Baym, 2015) or firmly post-social as in creators' interactions with the platform's interface. In sum, creators' interactions with the interface provide information to guide production as well as a basis for creators' affective attachment to work, what I elsewhere describe as a low-level effervescent experience that binds isolated workers to exploitative work conditions (Siciliano, 2021a).

8. Reward and punishment

The platform's interface and symbolic representations propagate and reinforce creators' metric orientation, but what of the platform's governance and remuneration structure? Metric increases directly impact earnings and so YouTube's remuneration system directly affects how creators understand the value of their products, not unlike other remuneration and labor measurement systems (see Biernacki, 1997). The above-mentioned Midwestern creator calculated his production costs against earnings in terms of cents per view – his payrate. As he said, "I was doing $0.06 to $0.12 [per view] and it was costing me $0.01 to $0.03 [per view]." Still, the logic underlying their remuneration remains obscured, governed by rapidly changing blackboxed algorithms (Caplan & Boyd, 2018). Creators tended to have no idea why they earned the specific rates per view that they earned. They often tried to guess based on the data made available by the platform. A music video creator said, "To see $13.00 [per thousand views] is pretty damn good because I think the average is maybe under three. I've noticed videos with guns in them don't make as much money and we try not to do those."

Creators associated their economic uncertainty with specific interactions vis-à-vis YouTube. For example, a video art creator described how his content ran rough against copyright law, creating problems for his continued use of YouTube.

> After three strikes [for copyright], you lose the channel entirely and it's like now they say that you can fight them, but I haven't actually tried because I'm really suspicious of [YouTube]. There's no reading into how [I use pre-existing media] or the meaning of it or fair-use or any of those things that we've established for how you're able to use stuff. It's just somebody proving that you're the owner and then they take it down and you get a strike. So, we've had that happen a bunch of times.

Creators generally understood their structural dependence vis-à-vis YouTube and expressed their uncertainty in these terms—a sentiment shared by others in digital publishing who also depend upon Google-owned infrastructures for remuneration and information (see Siciliano, 2016). As one creator said, "I mean the riskiest part is that the whole thing is controlled by somebody else. It's all controlled by Google. It's all controlled by YouTube, and, with the flick of a switch, my channel would be gone if they wanted it to be."

As the music video creator said,

> We'll see people [pirate and] re-upload videos of ours and they'll get 100,000 more views than us and they have five subscribers for their channel. I'm like, "What the hell is this? They uploaded this video a week after ours. It has more views than us. They don't have any subscribers. Are they hacking something? Are they paying for it? Did some big artist just share theirs instead of ours?" [YouTube is] like, "Ah, yeah we'll look into it." Then they just don't do anything.[3]

Many described YouTube in terms the echoed the inscrutable, silent god found in Weber's ideal-typical Protestantism (Weber, 1958), Franz Kafka's fictional bureaucracies, or, closer to the topic of discussion, platforms' "algorithmic cruelty" in which users experience the uniform application of blackboxed rules that cannot be questioned (Gray & Suri, 2019; see also, Siciliano, 2016). Highlighting cultural production's increased embeddedness within digital infrastructures, creators understood their wage uncertainty as stemming directly from changes to YouTube's algorithm and governance.

9. From infrastructure to content conventions

Creators' production processes tend to be oriented toward YouTube's metrics and algorithms, but how do these production processes affect content? *Here, I show how creators' metric orientation—reinforced and propagated by both YouTube and the MCN—impacts content in a variety of genres and thus how intermediaries further spread and reinforce YouTube's infrastructural power.* To be clear, I am not claiming that genre disappears, only that platform conventions tend to span all genres—producing formal similarity alongside difference. Additionally, I am only arguing that intermediaries propagate and reinforce platforms' conventions, not attributing direct causality.

Weekly, the MCN's staff and I generated recommendation reports for creators. Reports included boilerplate information similar to many of the "tips" provided in the platform's training videos. Each report reminded creators that "YouTube's algorithm stresses two important factors: session time [watch-time] and audience engagement" before going on to evaluate how well the channel conformed to a ten-point checklist of guidelines set forth in YouTube's training courses. As I said, the MCN never demanded changes, but only invited creators to implement recommendations. As a male vlogger explained,

> [My manager at The Future] was like you've got to figure out something with the channel to make it boost the numbers. It's just not viable right now. He was totally right because I let my channel fall by the wayside. For me, I appreciate that sort of no bullshit business thing. You gotta do better. Ok, you're right, but nothing where it's like this is the direction we're going to creatively take your channel in. It's like you figure it out, but just know that you've got to figure it out.

Creators could "create" what they wished, yet their wishes tended to be structured by metrics. Compared to conventional cultural production with multiple, autonomous, and often conflicting intermediaries, platformized cultural production appears more tightly bound to a single valuation mechanism (i.e., the platform's information regime and remuneration system) while also more loosely structured by that mechanism. Above, creators' production processes demonstrated this point.

Data below further demonstrates a tight coupling between a platform and content's formal conventions. As a YouTube comedian said,

> I mean you could do whatever you want, but if what you want is a lot more subscribers, then you'll realize that *YouTube is not your platform.* YouTube is your *client.* Your job is to create content that lets YouTube sell ads and, when the clients say, "What we would like is longer form content that sticks to these general principles" then you have a choice. You can either serve [or not] … and really, on YouTube, it's like quantity over quality and using what you learn to get better.

Notably, the creator makes no mention of his content's *content,* only *formal qualities* (length) measured by YouTube. Contra conventional gatekeepers, YouTube functions as both sole information regime (see, Anand & Peterson, 2000; Andrews & Napoli, 2006) and primary revenue source. The platform serves as structural equivalent to gatekeepers and consecrating institutions, imposing algorithmic concerns prior to genres and roles imposed by conventional intermediaries. Rather than balance multiple, potentially conflicting demands of autonomous intermediaries, creators tend to base aesthetic choices on platform metrics before considering genre.

Creators' practices were intended to increase "watch-time," or time viewers spend on a YouTube channel or video. YouTube's interface visualizes this metric as a graph of viewership over the length of a video ("audience retention"). Creators with high views, but low watch-times tend to be less valuable to the platform, which the platform and MCN repeatedly told creators.

In response, creators produced longer content to increase the metric (e.g., a 10 minute video increased watch-time more than a three minute video due to the former's length). As a woman who made fashion, make-up, and "lifestyle" videos explained,

> You can see the average amount of time that people are watching all of your videos and it's honestly, it's not a big margin at all. It's probably 1 minute and thirty seconds. So, if your [first] one minute and thirty seconds isn't entertaining enough, they're

---

[3] This could be interpreted as an example of YouTube failing to perform the emotional work that Shestakofsky highlights as necessary to smooth frustrations between platforms and users (2017). Considered along with my data, an event in 2018 in which one frustrated creator opened fire in YouTube's offices suggests as much. Prior to this event, she had repeatedly criticized YouTube's silence with regard to alterations in remuneration policies (Wakabayashi et al., 2018).

going to drop off. So, you really need to get to the point really quickly. Back in the day, they [my previous multi-channel network] told me that every video should be between 2 and 5 minutes. That's really hard to do. I'm trying to incorporate [longer videos]. It's easier for lifestyle videos to do that.

Increasing length creates another problem: viewer retention. Creators attempted to increase "watch-time" by creating engaging introductions. YouTube's training materials advocate this practice as part of a broader strategy to develop a coherent personal brand, thus acting as a vector for the self-branding discourse commonly found in the digital economy (Gershon, 2017; Vallas & Christin, 2018; Vallas & Cummins, 2015).

YouTube advocated particular strategies to enact self-branding to attract and retain audiences. Strategies include addressing viewers often and directly (e.g., opening with "Hey Guys" or "Hello Fans!") and developing "rituals" or repeatable segments for each video (e.g., a common catchphrase, a greeting, pet names given to fans). This may, sometimes, result in differently repetitive content. As a male creator said, "Nowadays, my focus is to keep them entertained from whatever I'm doing. So, I started like trying new things like putting filters in or changing my voice pitch or doing slow-mo to keep them interested." After making his videos longer to increase watch time, he added special effects to keep viewers interested or as he said, "Watch Time still is very—yeah, that's a very big one. I struggle to figure out how to make my videos longer, while still keeping them interesting."

Efforts to increase engagement metrics included "calls to action" (CTAs), a practice advocated by both YouTube and the MCN. Most YouTube videos begin or end with a CTA. In a CTA, creators tell audiences to perform some action while speaking directly to the camera. For instance, most videos end with creators telling viewers to "remember to click below to subscribe" or to click on various links to creators' presence on other social media sites (e.g., Twitter, Instagram, etc.). Creators strategize their placement of CTAs to increase metrics. As one said, "So on my videos, I will do the social [media] links at the bottom at the beginning now. It's at the end, but every time it got to the end credits everyone would leave. So, the second I started putting all the things up front, the social [media] links, all the socials blow up."

YouTube and the MCN told creators to place cards at the end of videos, creating a platform-specific convention. As a creator said, "All the networks and YouTube recommend it in that specific spot. You don't want any kind of a credits card up front. That's going to kill it." Mentioned earlier, creators use end cards to boost metrics by keeping viewers watching a channel's content. Cards present viewers with multiple in-video links at the end of a video to other videos, often by the same creator or collaborators. This may lead to an increase in overall views, subscribers, and, potentially, watch-time. The YouTube Studio interface reinforces this convention by offering an easy-to-use template for inserting title cards and so, as the above-quoted creator said, this practice tends to be "pretty much a universal truth in the YouTube world."

Despite these strategies, creators still experience the radical uncertainty associated with cultural production. A male creator that reviews and demonstrates music equipment on his channel said,

> My watch time is in the 90th percentile. It's huge but people are watching because they want to know the suggestion of the week. For the gear videos, people watch the song and that's generally about it. It's, you know, the watch time is 90% the first three minutes and then it tanks to like 35–40% after that. Knowing the numbers is cool but there's little you can do about any of that stuff. It really is putting your flag up on the pole and see who salutes it.

Armed with data, cultural production is still a "nobody knows" game (Caves, 2000), albeit one in which metric data plays an outsized role.

Differing sharply from conventional gatekeepers who often focus on qualitative assessments of talent (i.e., reputation and status) alongside quantitative data (see, e.g., Becker, 1982; Bielby & Bielby, 1994; Bourdieu, 1993; Gitlin, 1983), quantitative metrics outpaced reputation and status as creators' key concerns when seeking work opportunities. This was especially clear when creators and the MCN built production teams for what they called "collaborations" or "collabs." Creators anchored their decision in metrics, again marking a sharp difference compared to film and television where teams tend to be assembled based on a qualitative assessment of prior output (Bielby & Bielby, 1994). For instance, I asked a creator who produced martial arts videos if his affiliation with an MCN helped him gain access to production opportunities. Explaining that his MCN helped him collaborate with other creators outside his management network, he said, "Now, it doesn't matter what network you are in. If you have the same level of subscribers, you can work with [another creator]." Likewise, a female vlogger explained how metrics provided her with a way of ensuring that she's paid an appropriate amount of money by brands that sponsor her production. She said,

> Yeah, analytics are really important, especially when approaching brands for partnerships. YouTube won't want to monetize your channel if people are just dropping off automatically and brands will pay attention to those numbers as well because if people aren't paying attention to you and you're boring, then 9 times out of 10 a sponsor won't want to do a video with you because they'll feel that they're paying you and nobody's watching it.

An executive at the MCN provided a blunt answer when asked what constituted a desirable content creator: "Somebody that's doing over 10 million views a month and owns their own rights [to their content] that we can also do user-generated content for [i.e., have other creators collaborate with]." Employees of the network echoed these statements. As one said,

> Like, sometimes people will say 'Are they even relevant anymore?' and then we'll spend like 20 minutes discussing that. With these numbers, we can just look at the numbers and say, "OK, well they're doing like 500,000 a month, so maybe [they're] not [relevant] or we can say "No, they're still doing like 3 million monthly, so yeah, they're still worth it." We can also just gage how much money they'll be pulling in for the company and just gage how much they'll pull in [in terms of views].

Considered against prior theorizations of intermediaries, the MCN and its creators were primarily oriented toward quantitative measures of success with socially produced reputation, status, and genre conventions occupying a distant second.

While most fields of cultural production exhibit tensions between "art for art's sake" and market orientations, there exists no analogous "content for content's sake" at odds with metrics. Instead, creators described balancing their "personal brand" with "chasing views." Rather than finding the right balance between aesthetic and economic concerns (cf, Bourdieu, 1993), creators balance competing economic concerns both of which revolve around increases in metrics. This reflects what Poell, Nieborg, and Duffy describe as "*the proliferation of platform-based measures in all aspects of cultural production and distribution*" as key mode of valuing creativity and thus quantifying artistic quality (Poell et al., 2021, 143). This suggests that multiple, diffusely owned infrastructures provide the conditions of possibility for social conventions' continued salience as well as tensions between art and non-art that animated fields of cultural production prior to platformization (see Bourdieu, 1993).

Creators' orientation to metrics tended to be mediated by their imagined career trajectory. Creators seeking success beyond the platform in conventional media (e.g., film, television, or music) tended to be more forcefully against chasing *only* metrics and voiced concerns about quality. As a female comedian in Los Angeles that desired a career in television sketch comedy said,

> I've chosen quality over quantity as long as I've been doing this. It's not always been easy because you know there is a lot to say for, of course you want more exposure, but at the same time you just still have to say what do I really want to put my time into. You know, like trying to get subscribers or trying to write a really great sketch?

Another creator distinguished between creators seeking "internet popularity" and seeking success in conventional media.

> I think that there's a big difference between internet popularity or more like what I'm doing which is sort of using it to showcase what I can do or what I would be able to do if I did have my own [television] show or something like that. Really, to get a lot, to get true YouTube popularity, you do have to do topical stuff for the most part, but you also need to put content out on a weekly basis. You know, it's a lot about quantity.

During an informal discussion at the annual industry conference VidCon, one executive complained to me that musicians on YouTube tend to ignore platform-specific strategies. Instead, they focused on "just writing good songs."

Like workers in other fields who resist using platforms in inverse proportion to their economic dependence upon platforms (McDonald et al., 2020; Vallas & Schor, 2020), creators who pursued metrics less ardently more often straddled multiple, more conventional fields (e.g., music and YouTube, stand-up comedy and YouTube, contemporary art and YouTube, etc.) These creators oriented toward intermediaries within non-platform-dependent fields such as comedy and music, YouTube-centered creators (e.g., vloggers) oscillated between a metric-orientation and orientation toward their "personal brand" – both of which were advocated by the platform as ways to increase subscribers and thus, again, metrics. In conventional fields, genre conventions, professional reputation, and status inform intermediaries actions alongside quantitative information regimes (i.e., ratings; see, e.g., Gitlin, 1983; Napoli, 2003). In contrast, the field constituted by YouTube contains no internal, opposing valuation aside from the platform's metrics.

This crucial difference between what Poell, Nieborg, and Duffy (2021) call platform-dependent and non-platform-dependent creators appears linked to YouTube production's infrastructural distinctiveness vis-à-vis other fields of cultural production. You-Tube production, by definition, depends upon a single platform for distribution, remuneration, and gatekeeping. Few, if any, platforms in the U.S. provide comparable pathways for users to earn money from video content and all current, major platforms for user-generated content offer similar modes of valuation based on quantitative metrics.

Though oligopolistic, conventional fields of cultural production often contain competing and diverse valuations along with numerous, autonomous gatekeepers. In the absence of autonomous gatekeepers and competing valuations, platforms' infrastructural governance directly structures cultural production and intermediaries such as the MCN where I worked support rather than challenge, counter, or compete with platforms. This may yet change if the field of digital content production develops alternative institutionalized valuations.

10. Mediating and reinforcing platform governance

In this final data section, I again show how the MCN reinforced the platform's governance by supporting the development of producers' algorithmic orientation. Just as yesteryear's bureaucratized employees required training to develop their rule-orientation (Gouldner, 1964), platformized cultural producers require training and education intended to produce an algorithmic orientation. As noted above, the practices of platformized intermediary organizations remained unclear when I entered the field. As I show in this section, the MCN acts as another vector for the platform's power over content producers—assisting and mediating the power of platforms—rather than regulating the flow of cultural products or reproducing genre and other social conventions.

Rather than autonomously reproducing genre or role expectations a la conventional intermediaries, the MCN both reinforced and was subject to YouTube's infrastructural power. The MCN's staff reinforced the platform's infrastructural governance (i.e., interface, algorithm, and reward structure), perpetuating and reinforcing an orientation toward algorithms and metrics among creators. Reinforcing platform governance began when the MCN required its staff (including me) to become "YouTube certified" in "optimization" and "audience growth strategies." Certification entailed watching hours of training videos in which YouTube's staff explained how creators might grow and expand their "brands" and "optimize" their content to be better "surfaced" by the platform's search and recommendation algorithms. Talent management and "optimization" staff at the MCN, myself included, earned certificates from YouTube by taking tests about the information in these videos.

Information from YouTube's certification training formed the basis of our conversations with creators during which we

recommended many, if not all of YouTube's prescriptions. I frequently helped staff write recommendation reports for creators' channels. Reports followed a strict template with recommendations that were nearly identical to "tips" provided in YouTube's training videos. Each report reminded creators that "YouTube's algorithm stresses two important factors: session time [watch-time] and audience engagement"—echoed in both the interface's design and creators' practices. The reports then evaluated how well a creator's channel conformed to guidelines set forth in YouTube's training courses and a ten-point checklist developed by the MCN. For the most part, these reports made suggestions, rather than demands – recall the male vlogger above who recounted their manager's indirect directive to "boost the numbers."

Midway through fieldwork, my supervisor and I began to seek out "survivalist" and "prepper" channels—what my supervisor called the "male equivalent of beauty and make-up videos." These channels tend to feature men demonstrating and offering critical advice on camping, hunting, and outdoor cooking equipment along with food rations and "bugout bags." "Bugout bag" videos consisted of men going through the contents of specially prepared backpacks intended to provide survival equipment if one needs to "bugout" or leave a place very quickly due to, for example, a natural disaster or unforseen apocalyptic event. Men's bug-out bag videos resemble "What's-in-my-purse" videos in which women show off the contents of their handbags.

After my supervisor and I signed several survivalist channels to management contracts, we attempted to convince them to properly format their content. These discussions often focused on videos' formal and structural qualities along with metadata, and other paratexts that enable users and the search algorithm to make decisions about the content (e.g., tags, descriptions, still images)—what Karpik calls judgment devices (Karpik, 2010). One day after a team meeting, my supervisor and I went back to his shared office where he asked me to create a spreadsheet listing a survivalist vlogger's 900 videos. My supervisor explained,

> [The survivalist vlogger's] not implementing any of our suggestions so I just want like 10–15 [videos] a day, just a few to suggest to him everyday and to get him to change things. 900? That'd be too many for him and for us, so just a few per day. Pull his biggest videos based on 30-day views in [our company's digital] dashboard, figure out how to do that and create a sheet.

As was common, the MCN invited the creator to produce within YouTube's format. The inviting quality of these recommendations led some creators to internalize the information, following the recommendations. Others, like the survivalist vlogger mentioned above, and creators who worked in both conventional and platformized fields resisted the invitation while claiming that the MCN did "nothing" or "very little" to shape their content or further their careers. Even those who implemented the MCN's advice felt ambivalent about the company's services. For instance, a prank video creator said, "They kind of just leave me be and give me the, I guess, the benefits of it and let me go," a sentiment echoed by most of the creators with whom I spoke, even those with hundreds of thousands of subscribers.

As vectors of YouTube's infrastructural power over production, the MCN reinforced what Bucher (2015, 2012) describes as the disciplinary effect of platforms' algorithms, metrics, and rewards structures. Acting as such a vector, MCNs "format" creators for the platform. As mentioned earlier, formating refers to the selective exclusion of certain aspects of commodities (framing) in order to define the boundaries of any given commodity (Callon, 1998).[4] The formating of commodities by regulatory bodies or other actors directly alters and shapes said commodity. MCNs actively attempt to format and thus shape creators' practices and resultant content in accordance with YouTube's guidelines.

The MCN's mediation of platform governance helps produce and reinforce algorithmic orientations. Thus, downstream intermediaries support the production of what Nieborg and Powell call the "contingent cultural commodity" (Nieborg and Poell, 2018) or culture shaped in accordance with platforms' governance and reward structures. Again, this differs substantially from conventional intermediaries that autonomously impose distinctive regimes of valuation. For example, awards-granting institutions, cultural distributors, and exhibiting institutions, while all part of the same "field" or "art world," autonomously impose slightly different valuations upon cultural objects.

Still, why did creators sign management contracts with MCNs? Some creators joined the network due to perceived potentials such as brand sponsorships or a path to TV/film careers, but the MCN/creator relationship was mostly extractive and exploitative (see Siciliano, 2021a). Among the MCN's lower 75% of creators (25,000–100,000 subscribers), these potentials often failed to materialize, however, the top 10% (350,000+ subscribers) tended to receive more hands-on treatment—what Craig and Cunningham call "white glove" service (2019).

Most creators perceived the MCN as offering protection from YouTube's blackboxed governance—especially ContentID, an automated copyright enforcement system. Often, YouTube's most popular content runs rough against copyright laws. For example, PewDiePie, one of YouTube's most popular (and most controversial) creators rose to fame by creating videos of himself playing video games while reviewing or comically narrating his gameplay. Like most videogame players, he does not create the videogame itself. Similarly, many YouTube channels specialize in reviewing and analyzing popular films, often with pre-existing film footage re-edited into a review or critical description. Other channels simply take pre-existing YouTube content and repackage it under a different name. According to YouTube's training materials, the first two examples represent new "creative" works, officially classified by the platform as "new content" because creators added novel elements to pre-existing material. PewDiePie plays the game and adds his voice and face to the video just as movie reviewers add commentary to existing film footage.

Officially, the platform sees only the last of these examples as copyright infringement or piracy, yet many creators described instances wherein YouTube removed or sanctioned them for content legally produced or used under fair use. One creator who regularly

---

[4] Burgess, et al. (2009) speculated as to the relevance of Callon's concept, however they provided little empirical evidence, a crucial difference between their study and findings reported here.

reviewed films used elements from a movie trailer – a promotional material intended to be circulated in this form. A videogame company paid a creator to produce a promotional video using the company's intellectual property, yet the creator still received a "strike" for copyright infringement. After a lengthy and opaque contestation process, the creator convinced YouTube to remove the strike from his channel, but he lost all advertising revenues during the contestation process.

Generally, creators acknowledged the value of the MCN's aid when expressing their lack of power vis-à-vis the platform's automated copyright enforcement. Some creators described lengthy appeals processes that failed, while many described a silence and inscrutability similar to the relationship found among data analysts and cloud-computing platforms (see Siciliano, 2016). As a European animator explained,

> Yeah, you know you can't like get connected to YouTube and ask YouTube a question when you are in the position we are [in]. It's like impossible to get answers from them because - I understand that they get a billion questions a day and they can't handle answering them. So, their answer is "ask in the forum" - how do you say? Forum? But there are a lot of answers that no one knows in the forum, just YouTube (laughing) knows the answer. So, that is probably the main reason that we are connected to an MCN.

Most moderately successful creators (50,000–500,000 subscribers) with whom I spoke claimed to lack meaningful ways to contact YouTube.

Many claimed that their struggles to be heard by the platform drove them to sign with an MCN. The creator of a pranks channel suggested as much when we talked.

> Prankster: I've had issues when I'm not networked. My videos somehow get flagged for some reason. I don't know why. I think it's because the sound, the songs I used with everything. But, as soon as I get networked back up, they kind of go away.

> MS: Yeah, that seems to be a common thing.

> Prankster: Yeah, I think they kind of push you, kind of, towards it.

As mentioned earlier, YouTube never publicly supported MCNs and other downstream intermediaries. During my daily routine at an MCN, we frequently came into conflict with the platform. This casts doubt on the prankster's conspiracy claim, but his statement certainly illustrates a power-relation in which the blackboxed platform dominates and disciplines creators located downstream. From below, the platform's interests appear opaque and inscrutable, made legible only through mediation by the MCN and purveyors of "lore" (Bishop, 2020). The MCN propagated the platforms' interests—a key point left unexamined by extant research on platformized cultural production—while also providing protection from the platform's negative sanctions.

11. Discussion

Considering *infrastructure* in dynamic interaction with intermediaries extends conventional sociological approaches to cultural production by considering interactions between humans and infrastructure alongside producers, conventional intermediaries, and audiences as in Hirsch's "organization set" (1972), Bourdieu's "fields of cultural production" (1993), or Becker's "art worlds" (1982). Explaining cultural producers' practices requires consideration of both platforms' infrastructural features (e.g., interfaces, algorithms,
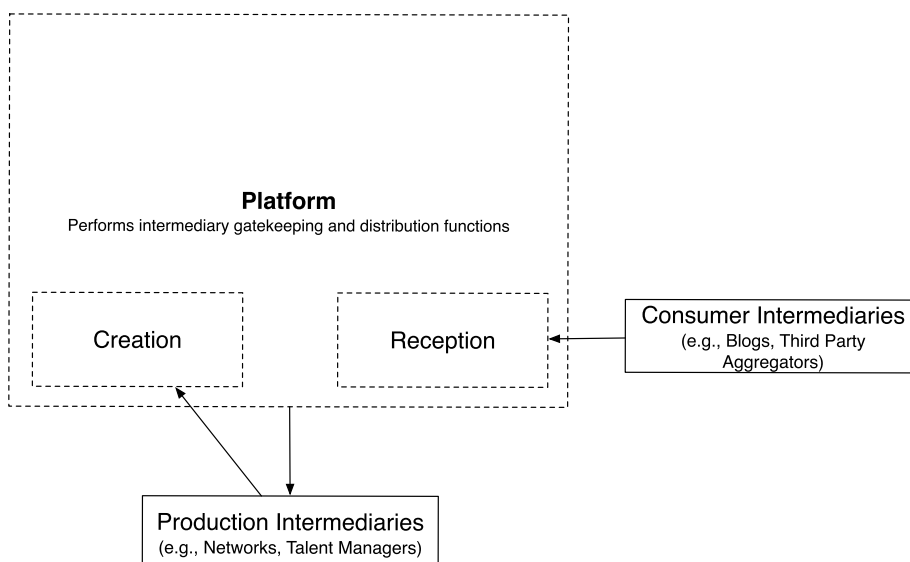

Fig. 3. Platformed Cultural Production.

and metrics) and platformized intermediaries. This directs sociologists of culture not simply toward examining how platforms affect their user/workers, but also how downstream organizations mediate and, in this case, propagate platforms' infrastructural power.

Tracing the entanglement of producers, infrastructure, and intermediary organizations enables a fuller explanation of cultural production, one attendant to contemporary conditions. The social structure of production differs from extant models of cultural production insofar as the most sociologically interesting interactions now occur between creators and the platform (Fig. 3, below). Unlike conventional theories, platformized intermediaries (e.g., MCNs and digital talent management companies) and platforms do not winnow the number of producers. Instead, platforms encourage an abundance of producers, setting low barriers to entry while using algorithmic suggestions to connect audiences to producers' content. Producers thus orient toward unstable, evolving algorithms, metrics, and other aspects of platform governance.

To be clear, I am not arguing for a crude technological determinism because, as shown here and elsewhere, cultural production's current socio-material entanglement evades linear causal explanation (Orlikowski, 2007; Orlikowski & Scott, 2015; see also, Thrift, 2005). Instead, I highlight how, rather than orient toward autonomous gatekeepers, YouTube creators developed common work practices in tandem with the design of the platform and the advocacy of an intermediary. Rather than reinforcing genre conventions or roles as do conventional intermediaries, platformized intermediaries such as the MCN make platforms' unstable, infrastructural governance legible to producers, supporting and propagating platforms' permissive power while also being subject to platforms' power. More succinctly, this case's platformized intermediary organization reinforced a platform's permissive power while subject to and mediating the platform's negative sanctions.

Thus, sociologists must consider not just interactions between platforms and producers, but the dynamic interrelation of platforms' interfaces and governance, producers, and intermediary organizations. Infrastructural context shapes practices that produce culture and so my argument is not that conventional sociological concerns (e.g., gatekeepers and consecration, genre considerations, etc.) disappear, but that platform-specific affordances and constraints mediate or alter their importance. This echoes Orlikowski's discussion of sociomateriality (2007; see also, Orlikowski & Scott, 2015) as well as Damarin (2013)) who makes a similar point when describing technology as a "convention" among knowledge workers in technology industries. Absent other modes of valuation and distribution, YouTube production appears intimately entangled in the platform's particular structures rather than developed in reaction to separate fields of creation, production, and consumption (e.g., Bourdieu, 1993; Childress, 2017; Hirsch, 1972). I am not arguing that conventional theories are in any way "wrong" or "incorrect," only that they require the above stated additions to explain platformized cultural production.

Sociologists of culture and work can identify key sources of power and inequality in the digital economy by focusing on interactions between infrastructures, intermediaries, and creative workers. This requires attention to aforementioned intermediaries as well as *platform's affordances or design elements*. Platforms vary considerably in their affordances and, logically, production processes vary with these affordances. During interactions between producers and the platforms' designed features, the platform—as primary gatekeeper, distributor, and remunerator—shapes the interests and practices of creative workers downstream and thus directly affects cultural production. In this case, the downstream intermediary reinforces the platform's power. In theory, larger intermediaries may endeavor to "co-opt" platforms, bending infrastructure to their interests, an already observable occurrence in relations between the Spotify platform and global music corporations such as Sony and Universal Music (Perez, 2020).

Sociology's "production of culture" perspective has long held that technology—information regimes in particular—shapes creative work and cultural production (Anand & Peterson, 2000; Peterson & Anand, 2004), however, this perspective tends to treat technology as an exogenous shock to which field participants react. Within platformized fields, creators' practices co-evolved alongside the platform and any changes to this infrastructure appear entangled—both exogenous and endogenous as they remain external to creators' production processes, but internal to the infrastructure in which those processes are embedded. Likewise, platforms differ in concentration of power and power's speed, scope, and scale—an already rehearsed argument made in media and information studies as well as the sociology of work (see, e.g., Caplan & Boyd, 2018; Gillespie et al., 2014; Siciliano, 2016).

My data suggest that platformized cultural production may be both *tightly constrained in terms of form* while digital content's *content remains relatively free*. This suggests that under conditions of highly concentrated or monopolistic infrastructure and supporting intermediaries, fields of cultural production will show neither diversity (Dowd, 2004) nor homogeneity (Peterson & Berger, 1975). YouTube content appears formally standardized while thematically heterogeneous, an observation that runs rough against public and scholarly narratives positing platforms as the absence of gatekeepers, as if they allow anyone an unfettered voice (e.g., Burgess et al., 2009; Castells, 2009; Jenkins, 2006; Kyncl & Peyvan, 2017). Far from being a transparent network through which content passes from creator to audience (*c.f.*, Castells, 2009), platforms and associated metric-orientation mediate cultural production, shaping content similar to "formating" or framing processes in other markets (see, Callon, 1998). While the diffusion of standardized practices lies beyond the scope of this study, future researchers might fruitfully analyze the longitudinal effects of changes in platform infrastructure on digital content's formal aspects with the hypothesis that increased formal standardization appear alongside increased thematic heterogeneity.

12. Broader relevance

These conclusions are directly relevant to fields of cultural or knowledge production undergoing rapid platformization, heightened since 2020 due to quarantines and lockdowns imposed in response to the COVID19 pandemic. The closing of conventional production and performance facilities in many culture industries resulted in a rapid pivot to platforms for distribution and exhibition. While obviously relevant to cultural sociology, these changes, considered against my findings, also suggest heightened similarities between creative work and innumerable jobs experiencing heightened rationalization and quantification due to platform infrastructures.

Regarding knowledge production, all academic fields currently face the proliferation of platforms and their metrics (e.g., Research-Gate, AltMetric, Academia.Edu, etc.). If traditional modes of distribution and valuation were to be removed or weakened, we may find an increased pursuit of goals set down by platforms' designers and owners at the expense of established conventions and practices.

Regarding labor in the 21st century, my findings suggest a wide-ranging, global trend toward heightened rationalization and quantification of labor (creative or otherwise) along with capital's shifting of risk onto labor. Striking similarities exist between platformized creative labor and routine jobs in Amazon's cutting-edge warehouses (Thompson & Smith, 2017) and, more generally, platformized work (Gray & Suri, 2019; Irani, 2015; Rosenblat, 2018). The latter occupy a structurally similar position vis-à-vis infrastructure and so future research might fruitfully compare disparate forms of work under similar infrastructural conditions (e.g., platform transportation and content production) alongside national comparisons within specific occupations.

Furthermore, the subsumption and subordination of both creators and MCNs further highlights content producers' position as *labor* rather than emancipated "entrepreneurs" as described by scholars of "creator culture" (i.e., Craig et al., 2021; Cunningham & Craig, 2019). Intermediaries aid in the platforms' exploitative capture of value produced by a global, precarious media workforce. Thus, my findings support recent critical examinations of platforms and the broader ecology of platformized cultural production (see, e.g., Nielsen & Ganter, 2022; Poell et al., 2021; Siciliano, 2021a; Duffy, 2017; Duffy et al., 2021).

13. Conclusion

Platformized intermediary organizations aid platforms by shaping cultural producers' orientations and practices. Platforms exert power over cultural production by shaping the infrastructural conditions of cultural production, while downstream intermediary organizations mediate and, in this case, extend platforms' power. Thus, explaining how platforms shape cultural production requires consideration of both the platforms' infrastructural aspects *alongside* and in dynamic interaction with more conventionally *social* structures.

Acknowledgments

Appendix A

Table 1

Table 1
Interviewees at Primary Fieldsite.

Gender	Role
Male	Department Manager
Male	Department Manager
Male	Department Manager
Male	Department Manager
Male	Department Manager
Male	Department Manager
Male	Executive
Male	Executive
Male	Executive
Female	Executive
Female	Executive
Male	Executive
Female	Staff
Male	Staff
Male	Staff
Female	Staff
Female	Staff
Female	Staff
Male	Staff
Female	Staff
Male	Staff
Female	Staff
Male	Staff
Male	Staff
Male	Staff
Male	Staff

Appendix B

Table 2

Table 2
Creator Interviewees.

Gender	Years on Platform	Subscribers	Primary Genre	Location
Male	6	1780,028	Comedy	Southwest US
Male	9	635,827	Music Lessons	Midwest US
Female	5	592,431	Vlog	West US
Male	5	516,473	Music Videos	Midwest US
Male	5	275,974	Gaming	West US
Male	7	209,517	Animation	Europe
Male	5	199,241	Corporate Brand	Southwest US
Male	12	179,485	Vlog	Midwest US
Male	11	169,219	Reviews	Northwest US
Male	10	156,813	Vlog	West US
Male	5	125,688	Reviews	Southwest US
Male	8	110,652	Vlog	West US
Male	8	78,050	News	West US
Male	5	76,648	Vlog	Midwest US
Male	6	54,616	Prank	Northwest US
Male	8	42,612	News	West US
Male	10	33,189	Animation	West US
Female	6	30,488	Vlog	West US
Male	10	20,095	Musician	Midwest US
Female	4	16,447	Comedy	West US
Male	11	13,031	Animation	West US
Female	9	10,655	Vlog	West US
Male	11	4624	Animation	East US
Male	4	3834	Gaming	West US
Female	8	547	Musician	Midwest US
Male	6	35	Musician	East US

References

Acland, C. R., Paul, D., Harris, S., Holt, J., Mattern, S., Miller, T., et al. (2015). *Signal traffic: Critical studies of media infrastructures* (1st ed.). Urbana: University of Illinois Press. Edited by Lisa Parks and Nicole Starosielski.

Anand, N., & Peterson, R. A. (2000). When market information constitutes fields: Sensemaking of markets in the commercial music industry. *Organization Science, 11,* 270–284, 3, Special Issue: Cultural Industries: Learning from Evolving Organizational Practices.

Anand, N., Gupta, A., & Appel, H. (2018). *The promise of infrastructure*. Durham: Duke University Press Books.

Ananny, M. (2016). Toward an ethics of algorithms: convening, observation, probability, and timeliness. *Science, Technology, & Human Values, 41*(1), 93–117.

Andrews, K., & Napoli, P. M. (2006). Changing market information regimes: A case study of the transition to the book scan audience measurement system in the U.S. book publishing industry. *Journal of Media Economics, 19*(1), 33–54.

Arditi, D. (2020). *Getting signed: Record contracts, musicians, and power in society*. Springer International Publishing.

Baym, Nancy K. (2015). Connect With Your Audience! The Relational Labor of Connection. *The Communication Review, 18*(1), 14–22.

Bechky, B. A. (2006). Gaffers, gofers, and grips: Role-based coordination in temporary organizations. *Organization Science, 17*(1), 3–21.

Becker, H. S. (1982). *Art worlds*. Berkeley: University of California Press.

Becker, H. S. (1984). *Art worlds*. University of California Press.

Beer, D. (2009). Power through the Algorithm? Participatory web cultures and the technological unconscious. *New Media & Society, 11*(6), 985–1002.

Bielby, W. T., & Bielby, D. (1994). "All Hits Are Flukes": Institutionalized decision making and the rhetoric of network prime-time program development. *American Journal of Sociology, 99*(5), 1287–1313.

Biernacki, R. (1997). *The fabrication of labor Germany and Britain, 1640–1914*. Berkeley: University of California Press.

Bishop, S. (2020). Algorithmic experts: Selling algorithmic lore on YouTube. *Social Media + Society, 6*(1), 1–11.

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), 1–10.

Bourdieu, P. (1993). *The field of cultural production : Essays on art and literature*. New York: Columbia University Press.

Bourdieu, P. (1996). *The rules of art: Genesis and structure of the literary field*. Stanford University Press.

Bourdieu, P. (1990). *The logic of practice*. Cambridge: Polity.

Bowker, G. C., & Star, S. L. (2000). *Sorting things out: Classification and its consequences*. Cambridge, MA: MIT Press.

Bucher, T. (2015). Networking, or what the social means in social media. *Social Media + Society, 1*(1), 2056–3051.

Bucher, T. (2018). *If … then: Algorithmic power and politics*. Oxford University Press.

Bucher, T. (2012). Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. *New Media & Society, 14*(7), 1164–1180.

Burawoy, M. (1998). *The extended case method*. Berkeley, CA: University of California Press.

Burgess, J., Green, J., Jenkins, H., & Hartley, J. (2009). *YouTube: Online video and participatory culture*. Malden, MA: Polity.

Caldwell, J. T. (2008). *Production culture: Industrial reflexivity and critical practice in film and television*. Durham, N.C.: Duke University Press.

Callon, M. (1998). An essay on framing and overflowing: economics revisited by sociology. In. *Laws of the markets, edited by Michel Callon* (pp. 244–269). Wiley.

Caplan, R., & Boyd, D. (2018). Isomorphism through algorithms: Institutional dependencies in the case of Facebook. *Big Data & Society, 5*(1), 1–12.

Castells, M. (2009). *Communication power*. U.K.: Oxford University Press.

Caves, R. E. (2000). *Creative industries: Contracts between art and commerce*. Harvard University Press.

Cetina, K. K. (2009). The synthetic situation: interactionism for a global world. *Symbolic Interaction, 32*(1), 61–87.

Cetina, K. K., & Bruegger, U. (2000). The market as an object of attachment: Exploring postsocial relations in financial markets. *The Canadian Journal of Sociology, 25*(2), 141–168.

Cetina, K. K., & Bruegger, U. (2002a). Global microstructures: The virtual societies of financial markets. *American Journal of Sociology, 107*(4), 905–950.

Cetina, K. K., & Bruegger, U. (2002b). Inhabiting technology: The global lifeform of financial markets. *Current Sociology, 50*(3), 389–405.

Childress, C. (2017). *Under the cover: The creation, production, and reception of a novel*. Princeton University Press.

Chun, W. H. K. (2005). On software, or the persistence of visual knowledge. *Grey Room, 1*(18), 26–51.

Corporaal, G. F., & Lehdonvirta, . V. (2017). *Platform sourcing: How fortune 500 firms are adopting online freelancing platforms*. Oxford: Oxford Internet Institute.

Craig, D., Cunningham, S., & Lv, J. (2021). Critical media industry studies. In. *Creator culture: An introduction to global social media entertainment* (pp. 96–114). NYU Press.

Cunningham, S., & Craig, D. (2019). *Social media entertainment: The new intersection of hollywood and silicon valley*. New York: NYU Press.

Curchod, C., Patriotta, G., Cohen, L., & Neysen, N. (2020). Working for an algorithm: Power asymmetries and agency in online work settings. *Administrative Science Quarterly, 65*(3), 644–676.

Damarin, A. K. (2013). The network-organized labor process: Control and autonomy in web production work. In. *Networks, work and inequality, 24:177–205. Research in the Sociology of work 24*. Emerald Group Publishing Limited.

Dowd, T. J. (2004). Concentration and diversity revisited: Production logics and the U.S. mainstream recording market, 1940–1990. *Social Forces, 82*(4), 1411–1455.

Duffy, B. E., Pinch, A., Sannon, S., & Sawey, M. (2021). The nested precarities of creative labor on social media. *Social Media + Society, 7*(2), 1–12.

Duffy, B. E., Poell, T., & Nieborg, D. B (2019). Platform practices in the cultural industries: Creativity, labor, and citizenship. *Social Media + Society, 5*(4), 1–8. November 2019.

Duffy, Brooke E. (2017). *(Not) Getting Paid to Do What You Love: Gender, Social Media, and Aspirational Work*. New Haven: Yale University Press.

Edwards, P., Bowker, G., Jackson, S., & Williams, R. (2009). Introduction: An agenda for infrastructure studies. *Journal of the Association for Information Systems, 10*(5), 364–374. http://aisel.aisnet.org/jais/vol10/iss5/6.

Finnegan, R. (1989). *The hidden musicians: Music-making in an english town*. Wesleyan. Reprint.

Foucault, M. (2012). *Discipline & punish: The birth of the prison*. Knopf Doubleday Publishing Group.

Geiger, R. S (2017). Beyond opening up the black box: Investigating the role of algorithmic systems in wikipedian organizational culture. *Big Data & Society, 4*(2), 1–14.

Gershon, I. (2017). *Down and out in the new economy: How people find (or don't find) work today*. University of Chicago Press.

Gillespie, T., Boczkowski Pablo, J., & Foot Kirsten, A. (2014). *Media technologies: Essays on communication, materiality, and society*. Cambridge, Massachusetts: The MIT Press.

Gillespie, T. (2010). The politics of 'platforms. *New Media & Society, 12*(3), 347–364.

Gitlin, T. (1983). *Inside prime time*. New York: Pantheon Books.

Gouldner, A. W. (1964). *Patterns of industrial bureaucracy*. New York: Free Press.

Gray, M. L., & Suri, S. (2019). *Ghost work: How to stop silicon valley from building a new global underclass*. Houghton Mifflin Harcourt.

Hesmondhalgh, D. (2019). *The cultural industries*. SAGE Publications.

Hesmondhalgh, D. (2021). The infrastructural turn in media and internet research. *The Routledge companion to media industries*. Milton Park, UK: Routledge.

Hesmondhalgh, D., & Baker, S. (2011). *Creative labour*. Taylor & Francis Group.

Hetherington, K. (2018). *Infrastructure, environment, and life in the anthropocene*. Duke University Press.

Hirsch, P. M. (1972). Processing fads and fashions: An organization-set analysis of cultural industry systems. *The American Journal of Sociology, 77*(4), 639–659.

Hirsch, P. M. (2000). Cultural industries revisited. *Organization Science, 11*, 356–361 (3, Special Issue: Cultural Industries: Learning from Evolving Organizational Practices),.

Hockenberry, M., Zieger, N., & Starosielski, N. (2021). *Assembly codes: The logistics of media*. Duke University Press.

Holt, F. (2007). *Genre in popular music*. Chicago: University of Chicago Press.

Irani, L. (2015). The Cultural Work of Micro-Work. *New Media & Society, 0*(0), 1–21.

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. NYU Press.

Kaiser, S., Müller-Seitz, G., Lopes, M. P., & Pinae & Cunha, M. (2007). Weblog-technology as a trigger to elicit passion for knowledge. *Organization, 14*(3), 391–412.

Karpik, L. (2010). *Valuing the unique: The economics of singularities. translated by nora scott*. Princeton University Press.

Kyncl, R., & Peyvan, M. (2017). *Streampunks: Youtube and the rebels remaking media*. HarperCollins.

Langley, P., & Leyshon, A. (2017). Platform capitalism: The intermediation and capitalization of digital economic circulation. *Finance and Society, 3*(1), 11–31.

Latour, B. (2007). *Reassembling the social: An introduction to actor-network-theory*. Oxford; New York: Oxford University Press.

Light, B., Burgess, J., & Duguay, S. (2018). The walkthrough method: An approach to the study of apps. *New Media & Society, 20*(3), 881–900.

Lopes, P. D. (1992). Innovation and diversity in the popular music industry, 1969 to 1990. *American Sociological Review, 57*(1), 56–71.

McDonald, P., Williams, P., & Mayes, R. (2020). How professional photographers engage with and resist digital platform work. *New Media & Society, 23*(6), 1602–1623. May 2020.

Mears, A. (2011). *Pricing beauty: The making of a fashion model* (1st ed.). University of California Press.

Morris, J. W. (2020). Music platforms and the optimization of culture. *Social Media + Society, 6*(3), 1–10.

Morrison K. (2014). "Old media investing millions to buy multi-channel networks on YouTube." September 2014. Retrieved March 25, 2015. http://www.adweek.com/socialtimes/old-media-investing-millions-buy-multi-channel-networks-youtube/205446.

Napoli, P. M. (2003). *Audience economics: Media institutions and the audience marketplace*. Columbia University Press.

Negus, K. (1999). *Music genres and corporate cultures*. London: Routledge.

Negus, K. (2002). The work of cultural intermediaries and the enduring distance between production and consumption. *Cultural Studies, 16*(July), 501–515.

Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New Media & Society, 20*(11), 4275–4292.

Nielsen, R. K., & Ganter, S. A. (2022). *The power of platforms: Shaping media and society*. Oxford University Press.

Orlikowski, W., & Scott, S. (2015). The algorithm and the crowd: Considering the materiality of service innovation. *Management Information Systems Quarterly, 39*(1), 201–216.

Orlikowski, W. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies, 28*(9), 1435–1448.

Pasquale, F. (2015). *The black box society*. Harvard University Press.

Perez S. (2020). "Spotify and universal sign new licensing deal, will partner on development of marketing tools." TechCrunch (blog). 2020. Retrieve March 11, 2022. https://social.techcrunch.com/2020/07/22/spotify-and-universal-sign-new-licensing-deal-will-partner-on-development-of-marketing-tools/.

Peterson, R. A., & Crane, D. (1994). Culture studies through the production perspective: Progress and prospects. *The sociology of culture: Emerging theoretical perspectives* (pp. 162–189). Oxford, UK: Blackwell Publishers.

Peterson, R. A. (1997). *Creating country music: Fabricating authenticity*. Chicago: University of Chicago Press.

Peterson, R. A., & Anand, N. (2004). The production of culture perspective. *Annual Review of Sociology, 30*, 311–334.

Peterson, R. A., & Berger, D. G. (1975). Cycles in symbol production: The case of popular music. *American Sociological Review, 40*(2), 158–173.

Plantin, J. C., Lagoze, C., Edwards Paul, N., & Sandvig, C. (2016). Infrastructure studies meet platform studies in the age of google and Facebook. *New Media & Society, 20*(1), 293–310.

Poell, T., Nieborg, D. B., & Duffy, B. E. (2021). *Platforms and cultural production*. John Wiley & Sons.

Powell, W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior, 12*(1990), 295–336.

Rosen, S. (1981). The economics of superstars. *The American Economic Review, 71*(5), 845–858.

Rosenblat, A. (2018). *Uberland: How algorithms are rewriting the rules of work*. Berkeley: University of California Press.

Rossman, G. (2012). *Climbing the charts: What radio airplay tells us about the diffusion of innovation*. Princeton University Press.

Roussel, V. (2017). *Representing talent: Hollywood agents and the making of movies* (Illustrated ed.). Chicago: University of Chicago Press.

Scholz, T. (2013). *Digital labor: The internet as playground and factory*. Routledge: Digital Labor.

Shestakofsky, B. (2017). Working algorithms: Software automation and the future of work. *Work and Occupations, 44*(4), 376–423.

Siciliano M. (2017). "Digital Labor's Blackboxed Supervisors." New Criticals (blog). October 16, 2017. Retrieved on October 16, 2017. http://www.newcriticals.com/digital-labors-blackboxed-supervisors/print.

Siciliano, M. (2021a). *Creative control*. New York: Columbia University Press.

Siciliano M. (2021b). "Creators são trabalhadores." DigiLabour (blog). August 1, 2021. https://digilabour.com.br/2021/08/01/creators-sao-trabalhadores/ Retrieved on August 21, 2021.

Siciliano, M. (2016). Control from on high: Cloud-computing, skill, and acute frustration among analytics workers in the digital publishing industry. Research in the Sociology of Work *Research in the Sociology of Work, 29*(1), 125–153.

Srnicek, N. (2016). *Platform capitalism* (1st ed.). Cambridge, UK; Malden, MA: Polity.

Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research, 7*(1), 111–134.

Terranova, T. (2000). Free labor: Producing culture for the digital economy. *Social Text, 18*(2), 33–58.

Thompson, P., Smith, C., Schmidt, I., & Fanelli, C. (2017). Capital and the labour process. *Reading capital today: Marx after 150 years*. London: Pluto Press.

Thrift, N. J. (2005). *Knowing capitalism*. SAGE.

Timmermans, S., & Epstein, S. (2010). A world of standards but not a standard world: Toward a sociology of standards and standardization*. *Annual Review of Sociology, 36*(1), 69–89.

Toynbee, J. (2016). *Making popular music: Musicians, creativity and institutions*. Bloomsbury Publishing.

Vallas, S. P., & Christin, A. (2018). Work and identity in an era of precarious employment: How workers respond to 'Personal Branding' discourse. *Work and Occupations, 45*(1), 3–37.

Vallas, S. P., & Cummins, E. R. (2015). Personal branding and identity norms in the popular business press: Enterprise culture in an age of precarity. *Organization Studies, 36*(3), 293–319.

Vallas, S. P., & Schor, J. B. (2020). What do platforms do? Understanding the gig economy. *Annual Review of Sociology, 46*(1), 273–294.

Wajcman, J. (2006). New connections: Social studies of science and technology and studies of work. *Work, Employment and Society, 20*(4), 773–786.

Wakabayashi D., Astor M., Salam M., and Stevens M.. (2018). "Police identify woman who wounded 3 at YouTube and killed herself; motive is unclear." New York Times, April 3, 2018. Retrieved May 8, 2018. https://www.nytimes.com/2018/04/03/technology/youtube-shooting-suspect-headquarters.html.

Wallenstein A. (2012). "Media bigs flock to YouTube power players | variety." November 21, 2012. Retrieved February 8, 2017. http://variety.com/2012/digital/news/media-bigs-flock-to-youtube-power-players-1118062549/.

Weber, M. (1958). *The protestant ethic and the spirit of capitalism. translated by talcott parsons*. New York: Scribner.

Zysman J., & Kenney, M. (2014). "Sustainable growth and work in the era of cloud and big data: Will escaping the commodity trap be our undoing?" Berkeley Roundtable on the International Economy Working Paper. 6 (2014).

Michael L. Siciliano is currently a Visiting Scholar in the Department of Communication at Tulane University. His-research focuses primarily on how workers become affectively attached to exploitative systems and how infrastructure impacts cultural production. To date, his publications include the book *Creative Control: The ambivalence of work in the culture industries* (Columbia University Press) as well as sole-authored articles in *Organization Studies, International Journal of Communication, Research in the Sociology of Work, International Journal of Cultural Policy, Volume!: The French Journal of Popular Music*, and *Footnotes: The Magazine of the American Sociological Association*.