

# The Work of Art in the Age of Digital Commodification

## The Digital Political Economy of the Performing Arts

*Sam Gill and Annie Dorsen*

Digitization is taking over every sphere of life—including the arts. Through the process of digital commodity fetishism, major technology companies threaten to efface the very qualities that make creative expression—particularly the performing arts—distinct and meaningful. To resist or even question these forces, we must excavate an invisible digital politics that can displace (and replace) traditional sources of authority in the performing arts. By examining the basic mechanisms of the “creator economy,” this politics can be found and confronted—in the arts and beyond.

### The Odd Omission of the Arts from the Digital Reorganization of Society

Amid our growing anxiety about the contributions of digital technology to the corrosion of truth, democracy, and mental well-being, relatively less attention has been paid to how internet-enabled computing has influenced what is often termed the “fine arts,” as well as the performing arts. While the initial rise of the commercial internet, its successor the social web, and the emerging decentralized web (or Web3) have all explicitly addressed questions of culture and entertainment, “the arts” as a conceptually coherent but broadly conceived professional and institutional practice of aesthetic production has not substantially figured into the conversation.

Among contemporary critics of various aspects of the way in which the internet has impacted society, the digitization of the arts—and especially the performing arts—has hardly received a passing glance. Often the worst that is said about digital performing arts content is that it’s aesthetically wanting. The topic rarely arouses interrogation, much less indignation. At the same time, the way in which the Covid-19 pandemic induced many performing artists and performing arts organizations to utilize technology to retain a connection with audiences was often cast as the embrace, whole cloth, of the language of techno-utopianism and the triumph of techno-determinism. Without any sense of self-awareness or even unease, many performing arts institutions proudly proclaimed the power of digital technology to reach new audiences and expand access to cultural offerings.<sup>1</sup>

---

1. For just one example, the president and CEO of the Performing Arts Center of Los Angeles County (which operates, among other venues, Walt Disney Concert Hall) noted in an opinion piece that “Embracing the promise and opportunity of a digital revolution, arts organizations are recognizing that their reach to new audiences expanded exponentially under COVID” (Moore 2021).

*Sam Gill is President and CEO of the Doris Duke Foundation. [sgill@dorisduke.org](mailto:sgill@dorisduke.org)*

*Annie Dorsen is a director and writer whose works explore the intersection of algorithmic art and live performance. She is also a third-year law student at NYU. [adorsen00@gmail.com](mailto:adorsen00@gmail.com)*

TDR 68:1 (T261) 2024 <https://doi.org/10.1017/S1054204323000618>

© The Author(s), 2024. Published by Cambridge University Press for Tisch School of the Arts/NYU. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives licence (<https://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is unaltered and is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use or in order to create a derivative work.

In this context, two ideas are worthy and urgent objects of discussion within the arts and among the collection of social critics, scholars, and activists who have forcefully questioned the rampage of digital technology into every facet of our social, economic, and political lives.

The first idea is that during a time of profound self-reflection in the arts, the assimilation of digital computing technology into the production, distribution, and consumption of human creative expression raises profound political and ethical questions about the status of artists, systems of aesthetic production, and the social role of arts and cultural institutions. Our contention is that the arts need to regard digital computing technology not merely in terms of audience and revenue access, but also as raising foundational political questions about the purpose and quality of artistic production.

The second idea is that the digitization of creative production reveals essential features of the overall digitally driven social reorganization currently underway. That is, to the extent we are seeking to grapple with how digitization is reshaping our society, its impact on the arts can help to illuminate the mechanisms of this transformation—as well as the stakes.

Our argument is two-fold. First: transformations to human creative expression wrought by commercially driven digital systems both clarify and presage an ascendant logic that prioritizes generating an increasing share of monetizable human attention as *both the precondition and the goal* of all digitally mediated activity. That is, this imperative is not only the objective of digital activity; it also shapes the productive impulse from which such activity springs. Second: this logic implants vulnerabilities in other systems of social value. This capitalist logic, left unchecked and unquestioned, has the potential to degrade or even wipe out the institutional systems designed to realize and protect other social goods. In the context of the arts, this logic operates as a kind of bait and switch. Promising the development of new audiences, broader accessibility to artworks, and new revenue streams for artists, digital platforms may actually produce many of the same damaging outcomes we have seen in other contexts: the reduction of everything into “content,” further concentration of corporate control over creative expression, the erosion of authoritative human discernment, and the intensification of human labor.

In making this argument, we address a wide variety of cultural expressions online, from the digitally microscopic act of “liking” someone else’s video or image to a classically trained ballerina posting a video of herself dancing to Beyoncé; from a theatre company live-streaming Shakespeare to a visual artist striving to amass a fan base on Instagram. These forms of expression are neither aesthetically equivalent nor comparable in magnitude and mode, and the phenomena we describe apply more to some of them than to others.

Not only do the digital production, distribution, and consumption of these forms of creative expression share a unifying digital capitalist logic, but that logic, in fact, depends on erasing all distinctions in content, whether it is considered high (fine) or low (entertainment) art, professional or amateur.

## From Copyright to Commodification

In the late 1990s and early 2000s, much of the commentary and scholarship regarding digitally enabled creative production focused on questions of copyright and ownership (see Lee et al. 2015). Digital creative content distribution arose alongside the commercial internet. Sometimes this distribution concerned materials openly available for public use, but the most notorious examples—think of music-sharing services, most famously Napster—trafficked in creative works in which someone or some entity could assert ownership. Major corporate content publishers, particularly TV and movie studios and record labels, were especially alarmed, fearing that paying audiences would find the allure of internet “piracy” hard to resist.

The principal result of these concerns was a series of international copyright treaties that were domestically ratified through the Digital Millennium Copyright Act of 1998 (DMCA). The law provides the major contours of how content is managed online. Among its chief provisions:

(1) rightsholders can set the terms of access; (2) any violation of access restrictions, implemented through electronic means, is criminally liable, whether or not the copyright itself has been infringed upon; (3) providers of digital services can avoid liability for copyright, so long as they take down offending content if notified by rightsholders.

This regime has been scrutinized and criticized on a number of fronts. A key issue among scholars has been the way in which the DMCA furthers a long-term evolution of US copyright doctrine to privilege content rightsholders over content users—and to ensure that commercial publishers, not individual artists, remain the dominant rightsholders. Siva Vaidhyanathan, for example, has remarked that, for most of the last century, “courts and corporations have exploited public concern for rewarding established authors by steadily limiting the rights of readers, consumers, and emerging artists,” explaining that “[a]ll along, the author was deployed as a straw man in the debate” (2001:25). On Vaidhyanathan’s account, by granting rights-holders the ability to set the terms of digital access, the DMCA favors corporate rights-holders, while eviscerating the “public bargain between producers and users” that enables creative production to serve a larger public good—one that relies upon actual use subsequent to the act of authorship or production (222–23).

Since the DMCA, the debate about the role of copyright in enabling or inhibiting the creative possibilities latent in digital technology has been extensive and engaged (see Vaidhyanathan 2001; see also Lessig 2008). In their 2022 polemic, *Chokepoint Capitalism*, legal scholar Rebecca Giblin and longtime commentator on digital trends Cory Doctorow blame the DMCA copyright regime for creating digital “walled gardens” that, they argue, disproportionately benefit a few publishers and service providers while reducing choices, freedom, and (digital) mobility for the rest of us. According to Giblin and Doctorow, the DMCA facilitated the growth of digital rights management (DRM) regimes through such applications as Apple Music and Amazon Kindle, systems that lock users into using Apple or Amazon hardware, respectively, to access their content (2022:25–27).

Unlike many contemporary critics who focus on the ways technology companies manipulate and sell human attention through social engagement and data extraction, Giblin and Doctorow do not see this as the central problem with digital technology. They argue instead that “Big Tech abuses monopoly power to deprive us of choice by limiting what we can buy, redirecting our searches to hide rivals’ products, and locking us into its ecosystem with technologies we can’t alter without a lengthy prison sentence” (2022:36).

For a time, the oddly inverse relationship between legal enforcement and the actual prevalence of unauthorized content distribution and use (“online piracy”) seemed to undermine Giblin and Doctorow’s concerns. Napster, which launched in 1999 and has been long seen as the avatar of the illegal content sharing era, was shut down in 2001—the same year that Apple debuted iTunes, its DMCA-compliant music distribution system. As soon as Napster shuttered, however, new file sharing tools immediately appeared, such as LimeWire and BitTorrent. Other copyright circumvention tools like “cyberlockers” have also emerged.<sup>2</sup> Like much illegal activity, assessing the prevalence of online piracy is difficult. Legal scholars João Pedro Quintais and Joost Poort suggest that, whether looking at actual piracy data or the impact on content sales (in music especially), it is clear that rates of piracy only continued to grow in the early 2000s—well after the adoption of the DMCA regime (Quintais and Poort 2019:812–13).

In an important shift that ultimately seems to confirm Doctorow and Giblin’s fears, Quintais and Poort argue that the more recent real decline in piracy is due to the widespread availability of cloud applications such as Netflix and Spotify that provide ubiquitous access to content—both streaming and downloading—at affordable rates. In terms Giblin and Doctorow might embrace,

2. A “cyberlocker” is a third-party service that provides file sharing and storing. Stream ripping is the process by which streaming data can be saved to a local or cloud-based file.

what Quintais and Poort seem to intimate is that, if the price of entering the walled gardens is low enough, most of us will be more than happy to entrap ourselves within them.

This brief history illustrates how digital technology companies actively manage the interplay between technological and legal tools to strengthen their control over creative expression. While many of these same systems of control had previously been exerted by analog gatekeepers like TV stations and music publishers, what matters now is how a distributed, many-to-many information network like the internet changes the modality—and therefore the reach—of control over expression.

But what these accounts do not explain is the continued development of the digital creative commodity form.

This is where we pick up the story.

## Creativity on an Industrial Scale

The most vivid illustration of how creative expression is being subsumed into the commercial internet has been the recent and stratospheric emergence of the so-called creator economy.

A digital creator is anyone who originates content online: whether a blog post or a comment on a blog, a picture or a video. The subject matter could be anything. The format or platform is irrelevant. The intent to make money from the content does not disqualify anyone from consideration as a “creator.” Yet to say that a creator is merely someone who does something online is a semiotic maneuver that misses a subtle but significant difference between a “creator” and an “influencer.” In seeking to distinguish between a “creator” and an “influencer,” technology reporter Kyle Chayka defines the creator as someone who *produces* the raw material of a content-driven internet:

The word “influencer” emphasized a person’s magnetic effect on her followers, a nebulous charisma easily turned toward marketing. “Creator,” by contrast, stresses that everyone posting on social media is *producing* something, pitching in to the collective effort of making user-generated platforms compelling and thus profitable. (Chayka 2021; emphasis added)

Though not mutually exclusive categories (a creator can also be an influencer and vice versa), a creator’s intentions are oriented toward an act of digital production, rather than toward self-promotion. While both may pull the same economic levers—the monetization of human attention through advertising—the purpose and form of their digital participation sets them apart.

The venture firm SignalFire estimates that approximately 50 million people are deriving some income from the productive act of creating for the internet. Of these, about 2 million are making content full-time (Yuan and Constine n.d.). Venture funding for the services that enable the creator economy jumped to over \$1 billion in 2021 (CB Insights 2021).

All artists utilizing online platforms to produce or promote their work are creators, though clearly not all digital creators are artists. When venture capitalists talk about the creator econ-

omy, the arts may be the last thing on their minds. They are often referring to the digital hobbyist, like a home cooking instructor, a rare lizard enthusiast, an amateur makeup artist, or someone inviting you to GRWM (“get ready with me”) on TikTok. But the subject position of the digital creator illuminates a logic that we predict will relentlessly dominate efforts to colonize the totality of human creative expression online (and, perhaps, offline as well).

**But the subject position of the digital creator illuminates a logic that we predict will relentlessly dominate efforts to colonize the totality of human creative expression online (and, perhaps, offline as well).**

To bring a commodity of the creator economy into being and enable its exchange, digital firms have brought to life a new kind of commodity fetishism. The “secret” of commodity fetishism, first

described by Karl Marx in *Capital* ([1867] 1990), is the process through which the social relations of production become submerged in a tradable good that presents its value as intrinsic rather than as the product of human labor. This is an important concept for Marx, because it accounts for the process divorcing value from labor, allowing for the aggregation of surplus value by the owners of capital (164–65). The sale of bottled water vividly illustrates this concept. Water is a freely available resource, supplied in most communities as a public good whose costs of capture and distribution are shared by residents through local taxation. Bottling water—which can then be marketed as “spring” or “purified” or “enhanced” water, therefore better for us than tap water—and selling it through a retailer obscures the natural availability of water and converts water into a product marketed interchangeably alongside other finished comestible and potable goods. What is important to recognize is not that some public goods are vulnerable to privatization, but rather that we come to understand water as something that is exchanged in a marketplace, rather than as a freely available community resource. Instead of seeing water as a distinct substance whose presumptive context is either free or shared use, we come to regard water as the same kind of thing as soda or juice—or even as chips or bread.

In the digital creator economy, commodity fetishism takes on a different character. The shorthand is “user-generated content,” but this term obscures a novel interplay between labor and capital.

The first aspect of digital commodity fetishism is the *commodification of expression*. This stage comprises using digital media services—YouTube, Instagram, TikTok—to convert expression, either planned or serendipitous, into digital content. All of these services are equipped with ever-evolving editing features such as filters, cropping, and tools to add text, music, or animation that make it radically easy to capture what you do (or say, or perform), modify your output to make it more entertaining to a potential audience, and then publish it for all to see and hear. As a human social behavior, this process is quotidian, even mundane. You can’t walk down the street without passing someone taking a selfie or video, presumably for a social media platform.

But, as a matter of political economy, this process is a radical act. Once the image, video, text, or sound has been uploaded and digitally modified, it has been transformed from a rich social context into a digital object that—at the layer of code—is functionally indistinguishable from the billions of other pieces of “content” that populate a platform. This content can then be seamlessly accessed across the platform, from a feed or a search engine, and compared objectively to other kinds of content. As Kate Eichhorn writes:

Reducing all forms of cultural production to content not only conveniently erases the specificity of different types of cultural production but also effectively ensures that all types of cultural production can be easily substituted for each other and exchanged. [...] After all, all content is part of a single and indistinguishable flow. (2022:2)

With the click of a button, this process converts an act of creative expression performed by a human being into a digital “thing” connected to a user. The productive context has been effaced. And, at this stage, the digital thing—content—can be connected seamlessly from one user, the content producer, to many other users, the content consumers. Critically, as Eichhorn says, this process makes all kinds of content the same. All other qualia—intention, context, affect, substance—are erased. Every bit of content is just another video, image, or post.

If the story ended here, it would describe what the technology companies hail as “disintermediation”: removing a gatekeeper—a newspaper editor, a cultural institution, a publishing house—from the exchange between a producer and consumer, enabling one-to-many and many-to-many relationships of production and consumption. At the surface, this describes nearly every social media platform, especially the vast ocean of people uploading pictures of themselves and commenting on pictures of others.

But the story doesn’t end here.

The second aspect of digital commodity fetishism is the monetization of creative expression, in which the algorithmically generated encounter between the digital content and an audience (between user as producer and user as consumer) is abstracted. In its conventional form, commodity fetishism abstracts the social relations of production through the seemingly objective artifact of the market price. In digitally enabled creation, the social relations of production are reduced to a share of attention: the size of an audience, measurable levels of “engagement” (number of and duration of views, likes, and so on), and the composition of the audience.

The abstraction of audience to attention share is a double movement.

First, it’s an abstraction in and of itself, as the share of attention represents a value that can be directly exchanged with an advertiser for money. Sometimes this happens through digital marketing agencies and “influencer” marketplaces, but often digital platforms manage this process directly.<sup>3</sup> The underlying digital content is irrelevant to this exchange.

For the exchange to work, advertisers must be able to trust that any and all content alongside or through which their brand appears also aligns with their economic and ethical sensibilities. To achieve this, many technology firms employ machine learning and artificial intelligence agents alongside the digital economy equivalent of child laborers toiling on the shop floor. In this case, the degraded and dehumanized laborers are content moderators, who are often employed as independent contractors and who may be in developing countries, well out of sight. This global underclass wades through the ethical excrement of humanity, often at the expense of their own mental well-being, ensuring that images of child sexual abuse or object violence do not appear in our content feeds (Chotiner 2019).<sup>4</sup> By filtering out attributes that would make the social context of the content impossible to ignore, the final stages of computational and human filtering remove frictions that might remind us that the world is not exclusively made up of photogenic meals and vivacious young people looking hot at the beach. As Kate Klonick reminds us, “[t]hrough corporate responsibility is a noble aim, the primary reason companies take down obscene and violent material is the threat that allowing such material poses to potential profits based in advertising revenue” (2018:1562).

Functionally, this filtering renders all digital content truly interchangeable from the perspective of the advertiser seeking to acquire human attention. Indeed, the advertiser’s real interest is the audience that is represented by the content: how big is it, who are they, how much money can they spend, and how engaged are they? Often, this movement is regarded as essentially indistinguishable except for scale and speed from the now century-old sale of attention through mass media—radio, television, and print. Yet this comparison misses the way in which the democratization of digital content introduces the very problem that content moderators are hired to solve.<sup>5</sup>

Also distinct in a digital context is a second movement, the re-abstraction of its viewers into sets of data integrated with billions of other data points about who they are and how they behave under certain conditions. The inferences gleaned from the computational analysis of that data are in turn used to refine how engagement is generated and sold, either through innovation in the services offered to users or in the services that facilitate advertising. Kate Eichhorn explains: “consider what happens when you’re asked to upload an image of yourself to a digital platform. On its own, your photograph isn’t valuable. If a platform has millions of tagged photographs just like yours, however, the photographs can be mined and, in turn, used to drive research and development” (2022:17). As Julie Cohen further elucidates, “[c]ultivated and extracted data enter an industrial production process during which they are refined to generate

---

3. As noted above, “influencers” and “creators” are properly distinct in intention, even if they both feed into the same economic transactions.

4. For a more thorough account of this phenomenon, see Sarah T. Roberts (2021).

5. And when advertisers cannot trust that either humans, computers, or both, are ensuring that humanity’s fallibilities and degeneracies have been screened out, they revolt (Statt 2017).

data doubles—information templates for generating patterns and predictions that can be used to optimize both online and physical environments around desired patterns of attention and behavior” (2019:64).

In the classical model of industrial capitalism, the fetishism of commodities enables the aggregation of surplus value by capital owners as they pocket the difference between the commodity’s price in the market and the total cost of labor. In the digital creator economy, the creator becomes an industry unto themselves through a final abstraction: the *industrialization of creative expression*. This third aspect of digital commodity fetishism is enabled through patronage (crowdfunding, subscriptions, tips, etc.) and sales channels (courses, merchandise, newsletters, direct engagement, etc.). In effect, these digital services intensify the act of digital commodity creation, absorbing greater time and effort from the creator and therefore subsuming more and more of the creator’s labor power into exchangeable digital objects. (So, for example, a home chef posting instructional videos may send a newsletter with recipes, may sell or resell cooking equipment, or may offer “master classes” for paid subscribers.)

Crucially, this digital industrial logic does not inhere within an institutional apparatus separate and apart from the conventional structures of sociality (“private life”). Contrast the 21st-century digital creator economy to legacy creative industries, such as the Hollywood studio system or recording labels. In those arrangements, devised in the 20th century, the extraction of surplus value in creative industries happened exclusively within a formal industrial system. In the 21st century, this model of industrial control over creative expression has swelled both in its reach and in its productive capacities. Today, anyone with a smartphone is a potential producer; and, any producer equipped with a digital device is an industrial production system unto themselves.

A tragic example of this phenomenon is Ryan Kaji, a child YouTube star who turned unboxing products into a brand. Born in 2011, Kaji has been making “toy videos” since he was three. (The videos are a kid explaining his new toys.) As of 2023, “Ryan’s World” had 32 million subscribers and Kaji’s net worth was \$35 million, deriving from an endless stream of now professionally produced videos across a diverse set of YouTube channels (Kang 2022). Even though Kaji’s performance is the product, it is clear that he, too, is an instrument of a corporate enterprise. (“During the shoot in Simi Valley, after a long stretch of filming in the intense sun, I overheard a crew member say to him, ‘If you finish this scene, you can play Minecraft’” [Kang 2022].)

While the digital platform exerts absolute control over the commodification, monetization, and industrialization of creative expression, it does not pay for the production itself. Instead, the platform bears the cost of developing and maintaining the tools and protocols that enable creators to voluntarily produce their own content. In exchange, the platform takes a percentage of what revenue-generating content earns in the attention marketplace.

The commodification, monetization, and industrialization of creative expression produce an abstraction of creative production three times over. First, the *act of production* is abstracted into a digital object produced by a user. When a person uploads a video of themselves lip-synching a song to TikTok, that video turns into a digital object that, from the perspective of TikTok, is completely interchangeable with any other video. Second, the *social consumption of the content* by other users (now users-as-consumers) is abstracted into an “audience” that is traded in an open market as a share of attention. In this market, content is compared not according to its rich social context, but instead according to metrics assigned by the platform—often focused on vectors of what the industry characterizes as engagement, such as popularity (“likes”), stickiness (how long on average users-as-consumers viewed the content), or recency (how recently on average users-as-consumers interacted with the content).

Third, the attention share of these users is then subjected to *computational organization* through increasingly vast data engines, whose output is used to refine techniques to further manipulate user attention towards still greater engagement. The digital platform is ultimately seeking to generate an understanding of “people like you” in order to increase the frequency and amplitude of your

views and interactions with content. In a digital context, this process is exponentially more granular than forms of market research conducted by older media (Netflix sorts its audience into more than 1,300 “taste communities” [Rodriguez 2017]) and can adjust path dependencies at the individual user level instantaneously.

The result of these three processes is that the content-producing individual themselves—the user-as-producer—is abstracted into a commercial enterprise. The user-as-consumer is no longer digitally interacting and transacting with a real human being, but instead with a range of products and services that, collectively, may represent the output of aggregated labor power. Yet, crucially, unlike the traditional corporate form, the enterprise presents itself as an unmediated human-to-human relationship. We—all of us—become the embodiment of the rationality of the corporation.

**The user-as-consumer is no longer digitally interacting and transacting with a real human being, but instead with a range of products and services that, collectively, may represent the output of aggregated labor power.**

The critical question, then, is whether and how this compounded abstraction influences creative expression, either in the creative process itself or in the experience of the audience.

## What’s New about Industrial-Scale Digital Creativity?

The capitalist logic of attention capture is neither generally new nor especially new to the arts. The phenomenon of mass media is well-studied. As audiences expanded by means of radio, film, and television, new opportunities arose for monetizing attention (e.g., “ratings”). These developments have transformed the arts since the early 20th century. The performing arts, in particular, have been variously produced, distributed, and consumed through mass media—often fomenting great debate about the aesthetic consequences.

Beginning with the earliest oral traditions and evolving through the establishment of formal venues and the professionalization of theatre, music, and dance, the performing arts have long pioneered converting attention into profit, whether monetary or as some other functional good, such as reputation, social cohesion, or political persuasion.

As with many digital phenomena, the question is whether the scale, instantaneity, and ubiquity of the internet intrinsically influence quality or whether they merely alter quality through quantity. To put it another way, are things online different by virtue of something about digital technology itself, or just because digital technology enables so much more of everything?

We believe there are five features specific to digitally mediated creative expression that deserve independent analysis. (We postpone for the moment the question of whether the results of these features are desirable.)

### 1. *Collapsing the Boundaries of Professionalism*

Art is unusual, if not unique, in its myriad modes, media, and motivations. Art can be amateur or professional, commercial or fine, for mass consumption or for specialists. It can sometimes be all of these at once. The history of art is a history of blurred boundaries, and of artists and artworks that don’t fit comfortably within fixed categories. Because the boundaries around art are often shifting, contested, and unclear, they can obscure at least two important conceptual questions in the perennial debates about the nature of creative production.

One is how the work is institutionally organized. “Professional” art, whether high or low, exists within some institutional setting (broadly defined) that shapes and constrains productive possibilities through the admixture of contingent logics (method) and intentional imperatives (as crass as



profit and as ineffable as beauty). As long as there is art, questions of method and intention will be engaged, prospectively or retrospectively.

The other locus in play is how art distinctly layers meaning and motive. That is to say, art can do many things at once, sometimes demonstrating superficial—if not less real—loyalty to a capitalist logic of attention maximization while simultaneously transmitting meaning entirely subversive of that logic. Rihanna's 2023 Super Bowl halftime performance was both the commercial equivalent of a Roman triumph and an almost ribald commentary on capitalist normativity about femininity and women's class status in the service economy.

But although the boundaries between so-called professional art and all of the other cultural and artistic expressions we humans produce are unstable and contested, we have typically located that contestation within institutional structures nominally loyal to the idea of aesthetic value. That is, among these institutional structures' many and sometimes conflicting commitments, at least one is to the idea that art has value—that it constitutes an important part of a desirable society.

It is important to note here that our definition of an “institutional structure” includes the audience. The “institution” of opera is a bounded set of methods (which can be followed or challenged in “the work”), a historiography (canon), a professional class (production and performance), a featurization (opera onstage, on TV, etc.), a work, a production of the work, and an audience (both in general and of the work). The internet transmutes elements of that institution—opera—such that a broadcast of *La Bohème* from the Met in NYC not only competes against the Netflix series *Squid Game* as an alternative experience but also is transmuted by the internet so that *La Bohème* and *Squid Game* are the very same kind of thing.

Digital commodity production obliterates the distinctions between professional aesthetic production and everything else. Rather than deepening an ambiguity about what constitutes quality, digital capitalist logic subordinates all qualitative distinctions to the relentless pursuit of attention share.

## 2. Creator/Audience Elision

In live and analog broadcast creative production, the lines between the producers, distributors, and consumers are generally clear. Although many forms of art play with the boundaries between artist and audience, for the most part, you know when you're one and when you're the other.

Digitally produced creative expression largely depends on platforms in which a single user can be both creator and audience, often simultaneously. The flywheel of content production (I post a picture) and content consumption (I comment or like someone else's picture) is the “social” part of social media: the act of sharing and the opportunity to experience what others share. “Processes of data extraction within the sensing net are also and importantly participatory,” explains Cohen. “Platform-based, massively intermediated environments enable people seeking connection with each other to signal their affinities and inclinations using forms of shorthand—‘Like,’ ‘Follow,’ ‘Retweet,’ and so on—that simultaneously enable data capture and extraction” (2019:65).

It is of course possible to lurk, consuming digital content passively—though even passive consumption is tracked and operationalized as view counts and other metrics. More importantly, the digital free riders do not alter the centrality of user participation to digital platform economics. As epitomized in the saying often attributed to former CNN and NBC CEO Jeff Zucker that the internet led the media to trade “analog dollars for digital pennies” (see Farber 2013), economic transactions for each quantum of online attention are significantly less valuable than their predigital equivalents. Where sometimes thousands of eyeballs could produce profitability at a local scale, digital platforms often require millions of users to deliver profitability. And the best predictor of strong user growth is “engagement”: how long people are spending with the platform and the ways in which they interact with it (Thompson 2022; Carroccio 2020).

What the platform operator experiences as a metric of engagement, the users experience as a social relationship. The platforms need and want you to be both user-as-producer and user-as-consumer, always producing new content for others, always consuming and interacting with new

content from others. And what keeps it all going is the three-fold abstraction of digital production—that the last thing on your mind when sharing a video or picture with your many “friends” is the creation of a digital commodity that allows, in turn, the commodification of attention, which is then sold in a market and integrated into a consumer attention efficiency machine.

A facet of this dynamic that is of critical importance to the performing arts is the way the digital system puts even renunciation of this elision under pressure to conform to its expectations. For example, a classically trained violinist uploading a YouTube video is presumably well aware that he is an artist performing for a distinct audience. But he may also know that the arbiter of success will be how the video performs in the metrics that express its ability to generate a dynamic and growing share of attention. Perhaps he adjusts his performance style, or the style of the video, to increase a sense of intimacy with the audience. Perhaps he builds into his practice a more thoroughgoing attention to the sociality of content: more hashtags, more tagging of people, more sharing, more time on YouTube and Instagram, more effort toward attracting more followers, and so on. He may not be happy about it, but the incentives to build his online presence are there.

### 3. *The Invisibility of Productive Constraints*

While some of the ways that digital platforms incentivize and shape behavior may be palpable, others are less so. As noted, digital production is far from unmediated. When uploading a picture on Instagram or a video on TikTok the user-as-creator is confronted with various filters and tools—all of which have been carefully designed in response to patterns of past creative expression through the process of computational organization. The tools the platforms offer have been designed and tuned to maximize user-as-consumer response and engagement.

That the medium itself is shaped by audience expectations is not new to digital creative expression. Concert halls have been designed to generate particular acoustics or viewing angles. TV and music executives greenlight projects and then carefully oversee production to ensure alignment with expected viewer preferences. Museums curate exhibitions in response to audience trends—or in hopes of setting such trends. Whether analog or digital, these latencies are often imperceptible to the audience.

But in analog institutional settings, these forces are generally apparent in the means of production, affording the artist an opportunity to acquiesce or to contest. A filmmaker may decide to produce outside of a studio in order to avoid creative interference. A visual artist may—and usually does—involve herself with the curation and presentation of her work in a museum or gallery. Breaking or upending audience expectations is, after all, one of artists’ most cherished prerogatives—and most powerful tools. Paradoxically, because constraints within legacy cultural institutions are so conspicuous, artists can wield greater control over the production and presentation of their work within them—or at least benefit from the greater awareness that is a necessary precondition for control.

Online, digital gatekeepers often disguise the way tools of creative production respond to and incorporate previous patterns of audience engagement, despite the fact that the computational capabilities shaping these services are, as noted, more granular and extensive than any audience sentiment detection and manipulation machine in human history. The drop-down menus and clickable tools present themselves neutrally, as a paintbrush or camera, when in fact they contain an *opinion* about the kind of content to which an audience will respond.

### 4. *Algorithmic Reintermediation*

Gatekeepers have long played a role in the presentation of the arts. They have also, by extension, played a profound role in determining the aesthetic contours of all art.

Authoritative knowledge conjoins information with power. To be a privileged knower is to shape what is real, what is right, or what is desirable.

The gallerist and the museum curator play an outsized role in determining who gets to be a professional visual artist and what is considered significant art. TV executives decide what stories

are told, who tells them, and who appears in them. The choreographer decides what combinations of movements get to be called “dance.” And, in nearly all art forms, the critic joins in, serving as a cultural evaluator.

Digital platforms often present themselves as forces of “disintermediation” that remove traditional gatekeepers between producers/creators and consumers/audiences—not caring if the relationship is between a singer and their fans or a car-for-hire and a fare.

However they operate, digital services do not establish a direct link between users-as-producers and users-as-consumers. Instead, as Cohen argues, these businesses are “also reintermediators, converting the labor of user-workers (and user-customers) into flows of monetizable data to which they enjoy privileged access” (2019:33). Through reintermediation, these businesses displace existing gatekeepers and insert themselves as the exclusive point of connection between creators and audiences. Listening to music on Spotify or a book on Audible isn’t going to the source. It’s going to a platform, one that is making a raft of automated decisions about what you encounter and experience, and then benefiting further as your use generates yet another set of data points to inform further algorithmic refinement.

It is important to recognize two features of the aesthetic and normative consequences of this displacement. The first is that the digital platform often has at least some different imperatives than the gatekeepers it is displacing. A digital platform rarely wants precisely the same thing as the theatre, the concert hall, or even the broadcast station.

The second is that the algorithms employed by the platforms are often replacing traditional gatekeepers that hold at least some authoritative status with regard to aesthetics. That is, when analog gatekeepers espouse the value of the artistic works they select, their utterances are regarded as worth something, even when contested. That their authority is so often challenged—by the Guerrilla Girls, or reactionary politicians, or countless other critics, both professional and not, from both within and without the art world—speaks to the power of institutional legitimization. After all, that which is without any influence need not merit a response.

##### *5. Atomization of Creative Labor*

One of the paradoxes of digital creative labor is the atomization of the creator within what is a fundamentally social experience.

Digital systems imply a “pan-sociality.” In theory, one could be connected with everyone, everywhere, all of the time. As it is, one armed with little more than a mobile phone and a weak signal is at least realistically connected to someone, somewhere, at some time. And, as noted, the commodification of creative expression means that the contemporary dancer and the lizard enthusiast both posting videos to YouTube are producing the very same thing, exchangeable in the same market.

Yet digital creators do not occupy an institutionally cognizable labor class. They are not in any meaningful sense “employed” by digital services, nor do they cohere into a self-aware community—at least from the perspective of labor leverage. They do not exhibit any of the markers of what might be called a class consciousness: an awareness of a common experience grounded in relations of production that have consequences for the distribution of opportunities and privileges. (Consider this in contrast to such creative industries as cinema, theatre, or music performance—all heavily unionized industries; this distinction was materially palpable in 2023 when both Hollywood writers and actors went on strike.)

Taken together, these features of industrial-scale digital creative expression are suggestive of a profound shift in how human creative expression is organized. Bright lines of self-awareness and

[T]he commodification of creative expression means that the contemporary dancer and the lizard enthusiast both posting videos to YouTube are producing the very same thing, exchangeable in the same market.

self-identity (separating amateurs from professionals) and audience (separating producers from consumers) have been muddled. Productive constraints have been adjusted according to new ends and imperatives. Traditional authorities have been displaced and diminished. The artist stands on new terrain, with new tools, and in a new milieu, facing an aesthetic logic guided by different objectives.

Undoubtedly, this shift opens up creative possibilities, as such epochal shifts always do. It may also present new challenges. These shifts are not merely descriptive, concerning only how art happens in a digitally mediated context. They are also epistemological, phenomenological, social, and political, concerning fundamentally what art is, who it is for, and how it is experienced.

## The Missing Politics of Digital Creativity

Over the past decade, arts communities and institutions have increasingly been engaged in a period of intense self-examination over issues of cultural representation, labor conditions, and environmental impact. Institutions especially are grappling with a long overdue appraisal of the ethical implications of the arts they sponsor. The critiques are both inward-facing and outward-facing, touching their internal operations (workplace culture, staffing and hiring, pay, working hours, and more) and their programming, communications, and outreach. Leading institutions have begun to grapple with the political reputations and global impact of their donors, the racial composition of their leadership, or their approach to programmatic decisions.

Individual artists, too, have participated in this fieldwide interrogation. Some appear as “newly admitted” and distinct voices within institutions in a self-described process of learning and reinvention. Some sharpen their attacks from the outside. And some, too, have looked inward and sought to raise questions—in their practice and in their work—about the once-sublimated political and ethical questions in the arts that are emerging with heightened visibility. French choreographer Jérôme Bel gave up touring by plane in order to lower the environmental impact of his work. His decision sparked a provocative debate about the privileged conditions that make his ethical stand possible (Rodríguez 2021). In 2021, the Yup’ik choreographer Emily Johnson developed and shared online a rider to her presenting contract that requires venues, among other things, to commit to including more Indigenous and BIPOC artists in their programming (see Johnson 2023; ILTA 2023; see also Wingenroth 2022).

The principal topics in these examinations have been important and searching. How has the decision about what constitutes aesthetically worthy artistic production been shaped by legacies now regarded as colonial and oppressive? How does the composition and distribution of authority within institutions and artistic fields contribute to aesthetic judgment? Who should art serve, aesthetically or as a social practice? And, who, in turn, should authoritative and mediating artistic institutions serve?

Remarkably absent from this period of ethical and aesthetic self-reflection has been almost any discussion of digital technology and its political implications for artistic production, distribution, and consumption. To varying degrees, both artists and cultural institutions have made use of the technological tools that have now evolved into the creator economy. Most prominently, artists and presenting institutions alike have, over the past decade, been increasing the availability of artistic production available through digital platforms. But neither artists nor presenters have probed the politics of the tools they readily use.

In fact, rather than approaching digital technology with caution, especially as the larger society has begun to cast a more skeptical eye on its potential social harms, the Covid-19 pandemic and associated closures turned a steady stream of digital experimentation into a flood. During the pandemic, venues often migrated live performances and in-person encounters to digital platforms out of necessity, offering live streamed concerts or plays, or virtual art exhibitions. Some institutions have continued to offer digitally mediated productions well past the acute phase of the pandemic. Artists and cultural institutions participating in digitally native experiences, such as building interactivity into performances or “tweeting” about one’s own work, are part of the trend towards

increased digital programming. (According to Eichhorn, self-promotion through tweeting builds “content capital,” and is a process of producing content about one’s self to attain and confer cultural legitimacy on one’s creative production [2022:84].)

Typically, the axes of the debate over these forms of creative production are aesthetic (the content is good or bad) and/or managerial (the content is revenue-producing or not). But the question of whether these decisions (“should we put it on YouTube?”), individual or institutional, constitute a speech act for or against a technologically impelled and corporately organized transformation in the creative mode of production is rarely asked.

But we need to ask the question. “Going digital” is not merely a mode shift. Digital creative production is inherently political because it accepts an economic logic that prioritizes the relentless pursuit of attention share over and above any other source of social value associated with aesthetic contribution. To engage in digital creative production is to *say something* about what art is (content) and is for (attention share).

We believe this introduces at least four vulnerabilities into the fine and performing arts.

### *1. The Reduction of Everything to “Content”*

In a critical analysis of Section 230 of the Communications Decency Act of 1996, the law that provides online platforms broad immunity from liability for harmful or objectionable expression posted by users, legal scholars Danielle Citron and Mary Anne Franks object to what they call “the Internet as a magical speech conversion machine.” As they painstakingly document, the kinds of digital “speech” assumed to be protected by this statute has grown almost infinitely expansive, encompassing “all online activity as normatively significant free expression” (2020:60–61).

Preceding these legal anxieties are those of a materialist sort. While the internet has a history of attracting free speech libertarians as its architects, engineers, and corporate bureaucrats, the phrase “the Internet as a magical speech conversion machine” captures the more fundamental logic that everything is equally “content.” It has become commonplace to say that in a digital economy “data is the new oil.”<sup>6</sup> But the real resource (one that is renewable) is content. Content drives engagement, which drives attention, which drives data generation, which drives surplus value. And the most engaging content is the kind the digital engine cannot itself produce—what is often described by critics and observers as “authentic” content, expressive of genuine human sentiment.

What digital platforms can do is combust so much content into what is arguably the most powerful dynamo for the occupation and further production of cognitive attention ever created. Since the early 2000s, the internet has converted an enormous amount of social and political expression and interaction into purely digital content. While the professional performing arts have been relatively exempt from these processes, we believe the creator economy is a harbinger of how every corner of creative expression—including the performing arts—may be subsumed.

Artistic content that is repurposed for digital distribution and consumption will be subject to the economic and algorithmic logic of digital platforms by appearing alongside and in competition with all other forms of content. This means that a contemporary dance company, for example, will need to incorporate digital imperatives into every choice—operational and artistic. Programs will be chosen on the basis of whether they can be designed in ways conducive to digital distribution. Productions will be organized to facilitate digital consumption, not as an experience subordinate to the live performance, but as co-equal with it, or of perhaps even greater importance. And these choices will not be shaped by a neutral technological substrate. Instead, distinctions between platforms that result from their varying business models and competitive positions will become aesthetically relevant. Perhaps on Instagram, certain types of groupings or movements engender

---

6. The phrase is generally attributed to British mathematician Clive Humby, who, according to the Clive Humby algorithm, said it in 2006.

greater digital engagement, whereas TikTok users respond to a wholly different set of performance features. In this context, it will be inadequate for the contemporary dance troupe or chamber music ensemble to eschew, for example, any awareness of these forces and say, “We’re real art—we’re going to do it differently.”

Benefiting from the algorithmically governed digital revenue machine requires playing by its rules. The gravitational pull of “clickability” has proven irresistible in other fields with high professional standards, most notably journalism. The internet engagement machine has not only unleashed a torrent of journalistically suspect content parading as news, it also influences the editorial priorities and choices of otherwise legitimate news organizations that are seeking to attract and retain digital audiences. Some of these features improve the work professional journalism is trying to do—convert information into verified and useful knowledge. But the economic logic of the internet means one cannot simply leverage those affordances of digital technologies that serve their aims—whether moral or creative—and eschew those that do not.

Artists and performing arts organizations already “manage to the internet.” Stephen Wright has documented this transition from “spectatorship” to “usership,” in which patrons become active participants in the presentation of art (n.d.:66–68). The evidence for this shift can be found in the growth of “engagement”-oriented experiences with intentionally social media-friendly moments, including immersive theatre and participatory experiences in museums and dedicated event spaces (see e.g., Cascone 2023). The focus on the Instagrammability of exhibitions, theatre, and dance is already old news, with the rise of the “art selfie” dating back at least as far as Yayoi Kusama’s 2017 “Infinity Mirrors” exhibit (see NPR 2017).

As digital platforms colonize the creative fields, the ceaseless drive to prioritize engagement may not only shape how theatre, dance, and musical ensembles perform in a digital context, but will also increasingly influence their analog prospects as well. In a world in which digital and

**As digital platforms colonize the creative fields, the ceaseless drive to prioritize engagement may not only shape how theatre, dance, and musical ensembles perform in a digital context, but will also increasingly influence their analog prospects as well.**

analog experiences have become coextensive and interdependent, the failure to compete digitally translates materially (“Do they get enough clicks for us to book them for an in-person venue or tour?”). Currency IRL (in real life) in the cultural marketplace depends on having an online following.

This has already long been the case in parts of the music business, where follower counts are tracked obsessively and the correlation between those numbers and bookings is taken as a given. Actors, too, know that whether

they get auditions often depends on their social media profile. A performance student at Pace told *American Theatre* that her professors “spent a good deal of time talking about Instagram.” She was guided to match her posts to her performance “type” but also “to make other interests clear, so that we come off as more human” (in McEntee 2020).

The conflation of all digital aesthetic production under the banner of the creator economy is an effort to reclassify the landslide of content within a discursive frame that evokes the same positive emotional valence as professional artistic production. Just as no one can be against “free expression,” no one can be against “creative expression.” Cloaked in our dearest values, the content machine rolls on.

## *2. Corporatization and Industrialization of the Creative Impulse*

Digital imperatives may increasingly influence the art that gets made. Artists are innovators and tinkerers. Key to their ingenuity, especially for artists who work outside established institutions, is the ability to pick up the tools and materials at hand. This act, repeated throughout history, synthesizes formal and authoritative techniques with subversion, transgression, and innovation.

The history of art is the history of this dialectic: an artist picking up a new technique or technology—a new pigment or brush stroke for a painter, a harmony for a musician, the use of verbatim text and headphones for an actor, live video feeds for a director—and bending that technique toward the creation of a work of art and the recreation of aesthetic normativity.

Until now, although systems of distribution, remuneration, and appreciation have almost always been controlled by others, artists generally retained control of their tools and instruments. Today, however, the easy availability of proprietary digital tools redirects idiosyncratic and localized forms of creative expression onto corporate-owned platforms, that, in addition to mediating access to the audience on an unprecedented scale, subtly or not-so-subtly offer a standardized, preselected, and economically optimized creative environment. These tools may be as simple as the options and limitations provided for uploading an image on Instagram or a video on YouTube or TikTok. For example, TikTok videos may not be longer than three minutes. This has nothing to do with the aesthetic value—or even aesthetic relevance—of three minutes and everything to do with what TikTok believes maximizes time on the platform. The artist is not offered control, but a series of constraints as well as preselected defaults—such as set colors, filters, and text tools—to present and modify the content.

The profundity of the artist's absorption into a corporately designed, curated, and operated environment is difficult to overstate. Unlike the artist picking up the tool—the video camera or the installations on a stage—the digital tool picks up the artist. Analog tools have some inert properties that constrain or enable aesthetic potentialities. In digital tools (like Adobe, Final Cut, and other fit-for-purpose digital creativity suites), a set of aesthetic potentialities already evaluated as desired by the audience are imbued within the very features made available to artists. Color palettes, embellishments, filters, and design functions, as well as audio mixing and video editing tools, have been carefully circumscribed to yield permutations within a specific aesthetic spectrum.

Silicon Valley's perennial promise to “democratize” access to the means of production has, in this context, a specific meaning. Here, to “democratize” means to make available at an initially low monetary cost a powerful set of tools that allow those who have access to participate in aesthetic generation toward a predetermined economic—and potentially aesthetic—destiny. The tools of production are not the only dimensions of this environment that have been shaped in advance. Who gets to see what is also predetermined, as the ubiquitous “you may also like...” feeds make clear. “Discovery” features, which mediate the relationship between the artist and the audience, determine almost exclusively who *sees* the work and therefore substantially shape its context. Once Netflix has determined which “taste community” the user-as-consumer is in, that individual is relentlessly guided towards more of the same.

As a consequence, while promising to remedy the elitism, homogeneity, and exclusionary gate-keeping of traditional institutions, digital services paradoxically subject all art-makers (wherever they fit on the spectrum from hobbyists and amateurs to outsider artists and professionals) to immersion in and cooptation by corporately owned digital services that are managed according to corporate ends that do not enable the creative independence of artists.

Chayka termed this phenomenon “AirSpace”: “the realm of coffee shops, bars, startup offices, and co-live/work spaces that share the same hallmarks everywhere you go.” In an influential article, he captured the feel of this new phenomenology through the increasingly homogenized travel experiences of globetrotting consultant Igor Schwarzmann:

Yet AirSpace is now less theory than reality. The interchangeability, ceaseless movement, and symbolic blankness that was once the hallmark of hotels and airports, qualities that led the French anthropologist Marc Augé [(1992) 2009] to define them in 1992 as “non-places,” has leaked into the rest of life.

As an affluent, self-selecting group of people move through spaces linked by technology, particular sensibilities spread, and these small pockets of geography grow to resemble

one another, as Schwarzmann discovered: the coffee roaster Four Barrel in San Francisco looks like the Australian Toby's Estate in Brooklyn looks like The Coffee Collective in Copenhagen looks like Bear Pond Espresso in Tokyo. You can get a dry cortado with perfect latte art at any of them, then Instagram it on a marble countertop and further spread the aesthetic to your followers.

This confluence of style is being accelerated by companies that foster a sense of placelessness, using technology to break down geography. Airbnb is a prominent example. Even as it markets unique places as consumable goods, it helps its users travel without actually having to change their environment, or leave the warm embrace of AirSpace. (Chayka 2016)

What might be appealing for lodgings, where comfort is paramount, is concerning in the arts. The arts are distinguished by particularity and locality: distinctive artistic voices, flourishing local arts communities, particularized art forms that engage with and speak to specific places and audiences. Musicians and producers already report that a “write to the platform” approach is influencing and homogenizing music by encouraging shorter songs and altered structures that move the chorus to the beginning of the composition (see Mejía 2019; Mack 2019). Theresa Ruth Howard notes that dance videos that play well on social media tend to feature extreme displays of isolated skills—hyperelastic stretches, dazzling turns, and flashy leaps—out of context and in short clips, essentially reduced to tricks. This influences what dance students expect to learn in class. She laments that

[s]urfing Instagram is like watching the virtue of dance as a high art deteriorate in real time. Who and what goes viral is a reflection of a newly forming value system. With each “like” and “follow,” we vote on the future of our field. (2018)

What is new is not the tension between human creative and productive autonomy and the extractive and insistent logic of capitalism. That is a challenge at least as old as the *auteur* in film or the musician grappling with the studio to realize a creative vision rather than “selling out” to the demands of the market. What is new is that digitally mediated tools for commoditizing, monetizing, and industrializing creative expression function as wholly sublimated, nonnegotiable commercial constraints. It is as if the camera (or the guitar) itself dictates the visual and sonic possibilities according to preexisting and invisible consumer judgments—all formed on the back of the greatest real-time feedback loop of consumer preferences ever conceived.

If this seems like an exaggeration, consider other areas in which we accept almost as conventional wisdom the unintended consequences of the algorithmically driven attention engine. Take race in a digital context, for example. In her prescient 2002 book *Cybertypes*, Lisa Nakamura identifies how even early web design belied “claims that the Internet allows for a more fluid, free, unbounded sense of identity than had been available in other media—or, indeed, in the world—before” (2002:104). She points out how the very design of a website “forces the user to choose ‘what’ they are, and allows only one choice at a time. This interface feature enforces a menu-driven sense of personal identity that works by progressively narrowing the choices of subject positions available to the user”—an experience especially acute for those who identify as nonwhite (103–04). As Nakamura writes, “The continued exclusion or underrepresentation of minorities as web builders may mean that interfaces continue to offer the same limited range of choices that are tailored, however unconsciously, to white users” (109).<sup>7</sup>

Or take a more general circumstance regarding individual self-representation and social behavior. Observers have noted the increasingly prescriptive role that digital cues play in shaping online

---

7. It is well established that those who design and build digital systems encode into the algorithmic architecture their own outlooks and biases, often without any conscious intention of doing so. Research on algorithmic bias by Safiya Noble (2018), Simone Browne (2015), Virginia Eubanks (2017), Joy Buolamwini (n.d.), and many others, has revealed how AI can amplify racism, sexism, ableism, and other forms of discrimination.



self-representation and behavior. That is, users-as-producers are responding not to analog social cues about desirable traits or behaviors, but rather to the engagement-oriented proxies for approval available on the platform (“likes,” “follows,” etc.). Beyond the Instagramstanding and thirst traps, the mere fact of engaging in social life online, in full view of a theoretical public, has an impact on how people behave. “Due to social media’s ubiquity, teenagers know that an audience of peers is watching, and use the technical affordances of social media to appeal to them,” explain danah boyd and Alice Marwick. “The publicity enabled by sites like Facebook or Twitter affects how conflict plays out in teenage social groups” (2014:9).

To engage in digital commodity production is thus to acquiesce to the logic of the algorithmic systems that drive user discovery according to metrics of engagement that function as both engine and fuel of the attention economy.

### 3. *The Erosion of Aesthetic Discernment*

Social media critics have focused on the ways in which digital disintermediation of speech has eroded the possibility of common truth (see Persily and Tucker 2020; Hasen 2022). What they have said less explicitly, but often implied, is that what is presented as digital disintermediation is in fact digital reintermediation, replacing human and authoritative professional discernment (what editors do) with algorithms that rank and order content based on correlates of profit potential. This is an important but often overlooked distinction. It is not that the internet is allergic to the idea of truth. It is rather that algorithms and their human operators obey and enforce an economic logic that gives priority to engagement and attention share—and does not, at least to date, consider truth. The collateral damage is the elevation of the voice that gets the greatest attention share within a particular audience, regardless of its qualifications as a representative authority on whatever content the voice is putting out. This sidelines traditional sources of authority, leading to their diminution and dilution.<sup>8</sup> As news consumers, for example, we tend to experience this as a sea of content in which it is difficult to tell “fake news” from “real news.” The quantity of content provided by low-cost purveyors of misinformation overwhelms what’s provided by high-cost curators of quality information, while offering many of the same badges of authenticity.

Without engaging in a full discussion of what interests shaped 20th-century broadcast media, we wish to make a simple and, we hope, relatively uncontroversial point about how the realization of those interests affects 21st-century media. However complex, indeterminate, and protean the relationship within 20th-century commercial media between the need to turn a profit and civic obligations, it was assumed that the media prioritized at least some notion of civic obligation. This sensibility shaped the formation and evolution of accepted professional standards that existed independent of any and every commercial media property. These standards actively enjoined the conduct of employees, who were understood to be part of a professional class. In many media companies, these standards directly influenced the character of the news division all the way from how the news group did or did not interact with other parts of the corporation to specific editorial and reportorial decisions and behaviors.

These civic commitments—their substance, claims, and strength—have been contested since the inception of broadcast media. Many media organizations have repeatedly failed to live up to the professional standards they espouse. Others have rebuffed those standards altogether. Critics of media organizations see the violation of those standards as proof of (often political) bias.

---

8. Obvious recent examples include the elevation of Covid-19 therapies not medically sanctioned, such as ivermectin or hydroxychloroquine. Or the widely believed view among many American conservatives that the 2020 presidential election was rigged against incumbent President Donald Trump and for Democratic nominee Joe Biden. These conspiracy theories originated IRL and were often amplified by traditional broadcast and cable media. But they were profoundly magnified by vast oceans of subsidiary quanta of misinformation (“This doctor says...”; “This election worker did...”) peddled by online influencers—some crassly pursuing a commercial interest, others genuinely committed to their erroneous beliefs. Consider a third example, the political conspiracy theory regarding “Hunter Biden’s laptop,” which has totemic status among many American conservatives yet has barely been mentioned in traditional media (outside of Fox News).

This criticism is practically an institution in American political life—and has been well before today's political right elevated this argument to an article of religious faith. The Public Broadcasting System (PBS) was created as a response to the perceived failure of commercial mass media to live up to its proclaimed civic obligations.

This background is significant because the disavowal of any standard for or even role in information curation is central to the development of the 21st-century commercial internet. That disavowal, and its codification in Section 230 of the Communications Decency Act, is at the root of the longstanding argument made by social media companies that they are not “editors” or “arbiters of truth” (see e.g., Fernandez 2020). Many digital operators feverishly cling to this assertion, despite recent crises (a global pandemic made immeasurably worse through disinformation, elections rife with fake news) that have forced many of them to adopt more intensive content moderation practices (and led others to seemingly abandon those practices altogether).

Undergirding the platforms' resistance to accepting the role of editor is a capitalist logic that cannot abide the interference—and therefore cost—of authoritativeness whatsoever. The availability of behavioral data generated through system interaction means that audience volume is generated not through identification of the lowest common denominator, but through the greatest possible degree of customization and differentiation. The more efficiently and effectively a company can enable you to experience content that is personal to each user, the greater its attention share. Discriminating against content on the basis of truth claims limits opportunities for increasing the attention of those who have fringe views and those who want to read, promote, and contribute to these views. The unintended side effect of enabling the dissemination of manifestly incorrect information is that the authority of accurate information is weakened, elided, or effaced altogether.

News reports and commentators describe this as a recent discovery, but many, including Nakamura in 2002, saw it coming:

In addition, the web has the aura of truth. I often describe it to others as a garage sale of information: while you will always find something, the value, accuracy, and relevance of what you find can be doubtful. For scholars and students, especially, the web requires that they use their critical agency more carefully than they might while scanning the Encyclopaedia Britannica. This caution needs to be kept in mind at all times, since the web's information comes to us in slick, telegenic, attractive images and text that give the impression of authenticity and legitimacy and can therefore seem true. [...]

These misleading sites of information, which often come delivered in the glossy, deceiving guise of a “legitimate” home page, can also contain hate speech. It's easy to illustrate this phenomenon through numerous examples: when I recently plugged the search term Holocaust into a popular search engine, I was directed to a neo-Nazi website that made the case that the Holocaust never happened, as well as to sites such as the “American Holocaust Memorial—memorial to the holocaust of abortion and its correlations with the Nazi holocaust.” (2002:110–11)

Something similar is now happening in the performing arts, as digital platforms displace so-called “legacy” gatekeepers like concert halls and theatres. The digital and legacy gatekeepers share some features. Both groups seek to connect audiences to creative production and extract economic value from the transaction. But legacy gatekeepers in the performing arts strive to fulfill at least two additional functions. First, they are committed at least in name to both elevating great art and to curating full aesthetic experiences for audiences. These two roles—elevation and curation—determine what art to present and how to present it in ways that maintain or even heighten aesthetic integrity. Second, many of these institutions develop practices expressly designed to nurture and support artists. Both of these functions rely upon making judgments about what art is worth presenting and what isn't.

The question of discernment invariably raises thorny debates about aesthetic normativity. The power to say what art is and what makes it good (or not) is the power to shape who gets to create it, who gets to consume it, and who determines the moral and social values it generates. This power

can be used to include and to exclude, as Black visual artists who were systematically excluded from the contemporary art canon of the mid-20th century—artists like Robert Reed, Norman Lewis, and Alma Thomas—can corroborate. An article from the late 1980s about the legendary Black curator Lowery Sims makes this clear:

Sims points out [...] that for curators the word “discrimination” can have a double edge. She goes on to explain that curatorial decision-making “is the act of discrimination, making choices that are the expression of our eye, our taste, our sense and standard of quality.” But she notes that discrimination also means to exclude, and both meanings, “exclusionary and choosy, have determined how non-white artists have fared in the art world.” (in Failing 2021)

Digital reintermediation may functionally widen access to aesthetic legitimacy. When algorithmically generated discovery displaces critical authority, new voices can emerge, many of whom might have been excluded in a pre-internet aesthetic regime. Changing the standards of authority changes who wins and who loses; obliterating authority altogether will undoubtedly do the same. But these platforms do not exist to promote art. The potential for artistic “democratization” is merely a positive side effect of the digital industrial model, a spillover benefit that flows from the displacement and eradication of traditional gatekeepers.

Arts institutions, by contrast, have been designed to support artistic achievement and enjoyment through the application of professional expertise. (Just as journalism institutions were designed to support professional methods that produce trustworthy information, and science institutions to facilitate processes of experimentation and verification.) Claims of professionalism can be misused or abused. Institutions can succumb to elite capture, or encode oppressive forms of normativity. They can fade into obsolescence and irrelevance. But somewhere in the inevitably polluted and fraught system of judgments about what constitutes aesthetic quality is a sincere belief in the value of art. While art—what it is, who it’s for—will always be contested territory, there is an essential accountability implied in defending art as an intrinsically valuable human pursuit.

Digital platforms may present themselves as neutral arbiters, simply acceding to the will of the users-as-consumers who ultimately make the choices about what content is presented. (As Elon Musk keeps tweeting in self-defense, “Vox populi, vox Dei” [Musk 2022].) But these protestations are in bad faith. Discovery features substantially delimit and shape the content any particular user sees, and these features channel data-intensive insights about nothing more than the preferences of “users like you.” As Vaidhyanathan points out, however, this is not apparent to the user nor does it describe the phenomenology of using these tools. Describing Google—but his analysis could stand in for any major platform—

Vaidhyanathan states that “Because of our faith in Google and its claims of omniscience, omnipotence, and benevolence, we tend to grant Google’s search results inordinate and undeserved power. These results offer the illusion of precision, accuracy, and relevance” (2011:3).

The obliteration of authority under the guise of neutrality will invariably come for the performing arts—if it’s not already here.

**The obliteration of authority under the guise of neutrality will invariably come for the performing arts—if it’s not already here.**

#### *4. Labor Intensification*

Until restrained by the liberal administrative state in the first half of the 20th century—the establishment of the FDA, the FTC, and early-20th-century labor protections, for example—industrial capitalism lowered the cost of essential but historically scarce goods like food, clothing, and medicine at horrific cost to the individuals required to pull its levers and turn its cranks: low wages, nightmarish working hours and conditions, child labor, and more. Sometimes, these conditions were so abject that capitalism tore itself apart. But sooner or later, most industrial capitalist regimes implemented modest reforms. Current consumer and labor protections are what remain of that legacy.

In the digital economy, new forms of labor exploitation have appeared, bringing back familiar pathologies with new symptoms. The grinding and ceaseless push to produce is amplified by gamification features (ratings for Uber drivers and DoorDashers, for example) and algorithmic fickleness (massive audience drop-offs for even modest pauses in content production). The incremental economics of digital work is also exponentially more challenging than earlier forms of creative labor. Music writer James Shotwell did the math and found that a musician in the United States in 2019 would need three million Spotify streams annually to have an income of \$12,000, putting a solo artist living alone just below the poverty line at the time (Shotwell 2019). Creator-economy venture capitalist and prolific commentator Li Jin reports, “On Patreon, only 2% of creators made the federal minimum wage of \$1,160 per month in 2017” (2020). A 2018 university study in Germany found that over 96 percent of YouTubers earn below the poverty line (Bärtl 2018; see also Sanchez 2018).<sup>9</sup>

The justification for these conditions is typically that users-as-consumers get more choices at less cost, while users-as-producers benefit from more autonomous and flexible working arrangements. On at least the cost side of the ledger, this certainly seems to be true. In the 1990s, a compact disc retailed from \$10–15; Spotify Premium is \$9.99 per month. The average price of one movie ticket is \$11; Netflix Premium is \$22.99 per month (Brueggemann 2022). In the fine arts, the fiscal gulf between an in-person experience and the digital equivalent is far larger. Museum admissions can run up to \$30 or more. Tickets to the theatre or classical music can range from ten to hundreds of dollars. Filmed versions of some of these events can be enjoyed from home, sometimes for free—or the cost of a monthly streaming service.

Most performing artists will argue that in-person presence is essential to an artistic experience of any work intended to be presented live. Yet data collected during the pandemic suggests that audiences are far less likely to express a desire to return to in-person performing arts than to other kinds of activities, especially those that are out of doors and more physically engaging (Dilenschneider 2022). Cultural venues around the country report audience attendance well below prepandemic levels (Paulsen and Hernández 2022). This may be salutary for some audience members, who no longer have to deal with the material costs of entry (tickets, transport, babysitter, etc.), or face the psychic costs of feeling unwelcome in rarified and exclusive environments. And, of course, these changes aren’t much of a loss for the many artists who, for any number of reasons, did not regularly have opportunities to perform for a paying audience before the pandemic.

At this stage in the argument, platform operators point out that their services provide creators direct access to audiences as well as unparalleled control over the spatial and temporal aspects of their work. As Julie Cohen notes, these operators rarely present themselves as employers:

These entities call themselves information businesses rather than, for example, temporary employment agencies or transportation businesses, and insist that, except for the people they hire to write their code and conduct their government relations operations, they do not actually employ anyone. Their true business, they argue, is disintermediation; they are simply facilitating the emergence of a new, freelancer-driven economy that is nimbler, more cost-effective, and less impersonal. (Cohen 2019:31)

Some take the purported benefits to users-as-producers a step further. While the workplace has long been hailed as a critical forum for socialization and a site of individual meaning-making, advocates of the creator economy describe a wholly different level of self-actualization. In a blog post for the venture capital firm Andreessen Horowitz, Jin—a former employee of the firm—coins

---

9. In addition, a study conducted by the United Kingdom’s Intellectual Property Office estimated that “a million streams per month, if sustained over a period of time *might* be a reasonable basis for a living wage for performers and/or Solo songwriters.” This would mean that 0.41 percent of artists who attain at least one stream in a month might attain a living wage (Hesmondhalgh et al. 2021:220).

the term “passion economy” to celebrate the way “[n]ew digital platforms enable people to earn a livelihood in a way that highlights their individuality” (Jin 2019). Another widely followed investor and commentator, Rex Woodbury, extols the virtues of emergent, “digitally native” jobs, such as a “digital artist” who sells art on the blockchain. Woodbury says these jobs “have the benefit of being global and scalable. While capital has always been borderless, labor was fixed. Internet platforms facilitate work—and economic opportunity—by making labor borderless” (2022). Woodbury paints what he seems to believe is a compelling picture of the future this technology enables:

In 10, 20, 30 years, I expect the average worker’s income to look less like a river and more like a set of tributaries all contributing to a larger body of water. You might work at a startup by day, but run a YouTube channel by night. You might day trade stocks and crypto, while contributing to DAOs [decentralized autonomous organizations] and getting paid in tokens. Maybe you do expert network calls on free afternoons, post sponsored content for brands, and manage a paywalled Discord server—all at the same time. Workers will have an arsenal of tools by which to earn a living. (2022)

In some ways, this already describes the experience of many working artists—one to which few nonartists aspire. Substandard wages and quality of life are already discounted or even valorized (the “starving artist”). Many artists also operate as gig workers, moving from commission to commission and project to project. The institutional dividends of organized labor, such as health care and other benefits, are not available for many artists and cultural workers—both for those who are freelance artists and for those working within cultural institutions. Emerging artists especially can identify with the experience of needing to supplement their income through other work and side hustles. Even established artists typically derive ongoing income from a mix of commissions, fellowships and, if lucky, a stable teaching position.

Optimistic accounts of technology-induced labor liberation seem to take it as a given that, because we all enjoy producing what others consume and consuming what others produce, we will, as a society, maintain equitable remuneration as masses of people convert their hobbies into productive labor. Needless to say, that outcome is implausible, even if desirable. And that’s a big if. Artists and other precarious gig workers can attest to the burnout and anxiety that accompanies their work arrangements. Many would regard Woodbury’s scenario above as a dystopian hellscape rather than freedom from the drudgery of traditional employment.

Even efforts to recognize the potential pitfalls of digital labor seem blinded by techno-optimism. Jin, for example, is a sensitive and nuanced commentator on the future of technology-enabled labor, arguing vocally for changes to the structure and design of platforms and services to enable a digital “middle class” to exist and to thrive (Jin 2019 and 2020). Still, when she compares the potential of the creator economy to Uber (and other similar services), the worst she sees is that

though these platforms provided a path to self-employment for millions of people, they also homogenized the variety between service workers, prioritizing consistency and efficiency. While the promise was “Be your own boss,” the work was often one-dimensional. (Jin 2019)

But the primary criticisms levied by Uber drivers against the service are not about the flatness of their labor, which is, after all, still just driving a cab. Instead, what they object to is a hyperscale algorithmic Taylorism: excessive surveillance, ranking and rating of even the most minute details of performance (such as if they “accelerate too quickly or brake too hard”), intense pressure to chase the next fare, and Kafkaesque changes to Uber’s pricing policy (Rosenblat 2018).

The digital operators’ account of these arrangements effaces the institutionalization of labor that emerged in response to the way the Second Industrial Revolution fundamentally reorganized relations of production. Cohen writes:

People have needs for stability and support that the system of wage labor for employers and its associated regulatory overlay addressed—never fully or perfectly, but at least deliberately and systematically. [...] The freelancer-driven economy is indeed lighter, nimbler, and more

efficient; those descriptions, however, apply most aptly to the processes of surplus extraction that it is designed to enable, which derive their power in part from their ability to avoid burdensome protective obligations that had coalesced around the old categories. (2019:33)

Despite the generally unfavorable structural position of the performing arts within modern capitalism, the forms of support that exist are designed at least in part to provide conditions conducive to creative development. Residencies, for example, are a common way for institutions to support artists by combining compensation, a place to work, connections to a community of artists, and the time to let the human mind and body do the work of creative expression. But it is unlikely that even these episodic moments of creative empowerment will—or can—exist in a digitally mediated environment. Many creators are all too aware of the “attention cliff” they face if they fail to produce a regular stream of content (Lorenz 2021). Nor have digital platforms yet shown much awareness of—or interest in—the conditions that enable creative expression to thrive, beyond cash support intended to keep the content assembly line running.

Our point is not that what engineers refer to as the “affordances” of technology are unable to provide benefits to visual or performing artists, nor do we wish to advance a halcyon view of the working artist. Rather, we want to illustrate that the primary aim of the creator economy, and what we fear will be its inevitable absorption of the performing arts into this economy, is the inexorable abstraction of all creative expression into a self-generating share of quantifiable attention. Aesthetic considerations are not cognizable, much less able to assert themselves, within the expanding imperialism of the digital capitalist logic.

As in other digitally disrupted industries—and unless demonstrated otherwise—we should expect the insatiable content appetites of digital platforms to further intensify creative and artistic labor, using the very tools of gamification and passive algorithmic surveillance that have been deployed in ride sharing, food delivery, and e-commerce fulfillment. This may be a trade-off that some artists will happily make. But we should anticipate that it is not neutral, but rather prioritizes attention (and the “engagement” that constitutes attention) over all other social goods.

Whatever the potential benefits of this industrial reorganization of creative expression, the vulnerabilities are readily apparent. So long as attention share commands absolute priority over other social goods in the development and operation of digital services, there will be risks to aesthetic distinctiveness and to the sustainable production of the arts. These transformations represent epochal shifts in artistic production—shifts that cannot and will not be value-neutral.

In his 1935 seminal essay, “The Work of Art in the Age of Mechanical Reproduction,” Walter Benjamin reminded us that “One of the foremost tasks of art has always been the creation of a demand which could be fully satisfied only later. The history of every art form shows critical epochs in which a certain art form aspires to effects which could be fully obtained only with a changed technical standard, that is to say, in a new art form” (Benjamin [1935] 1969). Benjamin’s contention, informed by the mass reproducibility of art (especially in the then nascent commercial film industry), was that mechanical reproduction had freed art from “parasitical dependence on ritual” enabling a political basis for creative production.

Appearing as a new technical standard—but in reality a new mode of production—digitization demands that we ask a different question: How do we ensure that this new political economy of aesthetic production does not, in its very operations, obscure all of its most pernicious effects?

## Generative Artificial Intelligence

We embarked on this project in the spring of 2022. In a particularly salient illustration of the pace of technological development, it was during the drafting stages of writing this piece that image-generating models like DALL-E, Midjourney, and Stable Diffusion began making waves. Then, on 30 November 2022, the hybrid for-profit/nonprofit organization OpenAI released ChatGPT 3.0, an electrifying development that almost immediately sparked a much wider conversation about the future of so-called artificial intelligence.

During the fall of 2022 and early 2023, we puzzled over whether and how to acknowledge these shifts in the context of this analysis. On the one hand, these tools do not represent the same kind of digital commodity fetishism that we have described. Our discussion has been rooted in the classical Marxian notion that the relations of production are ultimately social, that is, fundamental to the structure of relationships among people in the society. We have been at pains to show how the abstraction of creative expression into a digital commodity impacts the producer and the consumer of the performing arts in concrete, tangible ways. Our concern has been less about the humanistic ineffability of the artistic act than about how the instantaneous and ubiquitous processes of digital commodification threaten to rob audiences access to aesthetically wondrous experiences and to further immiserate artists while also dispossessing them of the full range of creative control. The aesthetic meaning of automated incursions into visual art, speech, and writing, as dispiriting or intriguing as it may be, is not the primary object of our analysis.

On the other hand, generative artificial intelligence systems can hardly be conceived of as discontinuous with the technologies whose development and deployment have animated the transformations we have described.<sup>10</sup> They are, in fact, an evolution of these technologies—if not their apotheosis. Algorithmic systems “smart” enough to create adequately engaging content threaten to render human input into the system we have been describing extraneous.

A few features of these new technologies are particularly pertinent to the issues we have raised.

The first issue is that generative artificial intelligence makes it plausible to imagine a genuinely closed loop in the act of creative expression. Humans remain a pesky inefficiency in almost any system of production, especially systems that trade on knowledge labor. Even the most disempowered worker has basic caloric needs and an efficiency frontier of about half the 24-hour day. One of the productive benefits of digital systems is that they can weather extreme churn. As one content creator burns out, another can take their place. All that matters from the perspective of dynamic growth is a user rate of replacement of  $x$ , where  $x > 1$ .

Generative artificial intelligence tools have begun to intimate the possibility of the nearly costless production of visual and text-based narratives without the need for human labor at all. As it is, all these tools require at this stage is a human prompt. But it’s not difficult to imagine a scenario in which AI-generated prompts produce AI-generated scripts for AI-generated movies “performed” by AI-generated actors.<sup>11</sup> Arguably, this is the end toward which these systems are directed in the first instance. In an interview on the TWIML AI Podcast, Emad Mostaque, founder of Stability AI, the company behind Stable Diffusion, uses the example of PowerPoint to illustrate how this might work:

Like slides. If you go with an image model combined with a language model combined with a code model, you never need to make a presentation again. It understands what aesthetics are [...] But where we’re going we’re not going to use prompts [...] I think it will just be a case of, like, you have your own embeddings stored that points to points in the latent space that then pulls up the things that you like most prominently [...] and then why do you need to prompt [...] when it learns that that’s what you want to have, the type of style that you like. (in twiml 2022:17:06)

In a manufacturing context, the typical defense of “closed-loop” artificial intelligence systems is a conjectural theory of human liberation. As the argument goes, the transition to automation will produce enormous amounts of wealth while displacing huge portions of the human labor force. And since for so many, work is terrible anyway, we can use some portion of that wealth to provide for basic needs, enabling the emergence of a massive leisure class that can direct its productive energies toward self-actualization. This line of reasoning is a big part of Silicon Valley’s seeming obsession with “universal basic income” schemes (Altman 2021).

---

10. Or, for purists, the instruments and subjects of labor represented by algorithmically guided user experiences and ultra-large user datasets, respectively.

11. Indeed, the threat of such a future was a central motivation for both the WGA and SAG-AFTRA strikes. These strikes were only just beginning to resolve as this article went to press.

Unlike the sweatshop worker whose body is falling apart making Nike shoes, it is the social media content moderator's soul that is under threat from wading through the effluvia of human hate and psychopathy.

But we should be suspicious of any narrative of human liberation from labor. As noted earlier, the advent of the social web has actually intensified the geographic displacement of human subjection and immiseration that began 50 years ago with globalization. Unlike the sweatshop worker whose body is falling apart making Nike shoes, it is the social media content moderator's soul that is under threat from wading through the effluvia of human

hate and psychopathy. Not to mention, of course, that there are some kinds of work from which we do not seek liberation. Humans do not paint, sing, dance, or write because machines can't. We do these things because we enjoy them.

Perhaps more worrying, the rise of generative artificial intelligence suggests that the "liberation" of the artist can only be achieved by a stunningly comprehensive act of creative expropriation. Just where do we think these wondrous tools are learning how to reproduce the magic and craft of visual and literary arts? They are ingesting terabytes of publicly available digital indices of novels, poems, and visual arts as well as scooping up proprietary sources like Getty Images (Chayka 2023a). About this, the architects of these systems are glib. Mostaque describes his model as "two billion images, a snapshot of the internet, compressed down" (in twiml 2022:15:10). He jokes, "Artists never make money, right?" (14:27). Midjourney's founder David Holz shrugged when *Forbes* asked if his company sought consent from living artists. "We weren't picky," he explained, meaning they just took everything they could find (in Salkowitz 2022).

Along with many other vexatious questions regarding these new technologies, courts have only just begun to untangle whether what these companies are doing is legally impermissible, either because it constitutes copyright infringement, or violates the DMCA or other statutes. And legislators will have to decide if they want to regulate this area and how. But we should not expect either the courts or Congress to resolve matters in a way that prioritizes the needs of independent artists, or on a schedule fast enough to prophylactically protect them.

A second issue is the homogenization these tools produce. While Holz asserts that "we see this technology as an engine for the imagination," rather than its demise, elsewhere he acknowledges the model's humdrum "default styles," admitting the artificial intelligence program "likes to use teal and orange" (in Vincent 2022; see Herrman 2022). As discussed earlier, "democratization" of the arts merely means a legion of creators contributing within a predetermined set of aesthetic parameters, feeding audiences through hyperpersonalized discovery tools that, paradoxically, guide everything they view toward a bland mean. Are we ready for a world in which aesthetic horizons stretch all the way from teal to orange?

A third and related issue is that all of this happens in a context in which the generative artificial intelligence tools obfuscate the mechanics of creative and aesthetic production, absolving the technology operators of responsibility both for the creative outputs and for the impact of their services on existing economies of aesthetic production. What happens to art when the technology setting the defaults within which "creative" output is produced is described by its own creators as having "no will, it has no goals, it has no intention, no storytelling ability" (Vincent 2022)?

Generative artificial intelligence takes abstraction of creative expression to new heights, or perhaps new depths. Original artistic production is absorbed into a dataset used to train an automated engine of creative production, which is activated through a series of prompts. The prompts trigger the creation of outputs that cannot be audited, explained, or understood in any meaningful sense by the person keying in the prompt or even by the developer of the model. What's more, having absorbed the "essence" of creativity—here defined as a mathematical representation of the common features of the billions of images in its dataset—the generative AI system divorces the idea of the artist from the actual creation of art. It is the person keying in the prompt who now calls on the



algorithm to “produce” art. To wit, there’s already a term, “prompt crafting,” for the skill of manipulating these systems to get a desired result. Companies are recruiting this new “expert,” offering mid–six figure salaries, far more than most practicing artists earn (Anthropic n.d.). Who or what is the actual artist in this scenario? According to Chayka, the artist becomes:

a template, a brand-name, a signifier of some specific style. [...] Fans generate art (or music) in the style of the artist, and the figure of the artist becomes emptier and less meaningful, something to be ignored the way we ignore factory workers on an assembly line, or allow algorithmic feeds to do the jobs editors and curators once did. (2023b)

Rex Woodbury is sensitive to some of the philosophical questions in play: “There are some dystopian elements to AI’s creative side, of course; at what point does AI stop augmenting our creativity and start negating it?” he asks in a post (2023). Nonetheless Woodbury refers to these tools as “amplifying human creativity,” noting that “what’s so exciting about generative AI; it can make anyone (even me!) more creative.” Woodbury even asserts that “AI is certainly proving that it’s capable of human-level creativity.” The proof? “In one study, researchers compared human-generated ideas with AI-generated ideas across six chatbots, reporting: ‘We found no qualitative difference between AI and human-generated creativity’ (!)” (2023).

Generative artificial intelligence does not “amplify” (or augment, or extend, or approximate) human creativity. It modifies human productivity. Like all tools, AI affects human labor power. I can use Midjourney to render an image I would not be able to produce with my own hand. But that does not make me more creative. The assembly line undoubtedly augments the productive capacity of the individual worker. It does not amplify their humanity. Quite the opposite.

The designers and operators of these systems seem to be aware of this, though without really understanding the implications. “Another advantage for artists,” says Holz, “is it gives people confidence in areas they’re not confident in. Most if not all artists feel like there’s some part of art they can’t do well” (in Salkowitz 2022). In other words, generative artificial intelligence saves the artist from having to work on their craft. Writer Ted Chiang recently made this point about ChatGPT and other large language models:

Some might say that the output of large language models doesn’t look all that different from a human writer’s first draft, but, again, I think this is a superficial resemblance. Your first draft isn’t an unoriginal idea expressed clearly; it’s an original idea expressed poorly, and it is accompanied by your amorphous dissatisfaction, your awareness of the distance between what it says and what you want it to say. (Chiang 2023)

That dissatisfaction drives the creative process, and brings with it other benefits, in the form of humility, experience, and, eventually one hopes, mastery.

W.H. Auden once enjoined of artists that “Insofar as poetry, or any other of the arts, can be said to have an ulterior purpose, it is, by telling the truth, to disenchant and disintoxicate” ([1962] 1963:27). To the extent that generative AI, even more so than other digital creative tools, secrets away deep within its neural networks the link between the creative impulse and the final output, it actually denigrates creativity, recreating in an ersatz form a pale, homogenized imitation of the human imagination. Creative expression that we cannot explain—or decompose, or understand—is all enchantment, all intoxication.

The answer to Woodbury’s rhetorical question, “at what point does AI stop augmenting our creativity and start negating it?” is: at inception.

## What the “Creator Economy” Reveals about Dominant Digital Logics

The creator economy is important not just for its impact on the arts, but also for how it illuminates the impact of internet-enabled technology on larger questions of political economy. As noted at the outset, concern over the role of digital technology in our social, economic, and political lives has reached a crisis point. Our anxieties encompass every conceivable kind of socioeconomic distress,

from individual health and well-being to the society-wide collapse of any semblance of epistemic consensus.<sup>12</sup> What typically links these critiques of digital technology is a recognition that particular features of digital technologies have, variously, exacerbated existing individual and social pathologies, accelerated their spread, or transmuted these pathologies into something qualitatively worse (or all of the above). The picture is one of metastasis: whatever was already there is worse and is spreading. The prognosis is grim, probably terminal.

Since the “techlash” in the wake of the 2016 election, a growing number of theorists, scholars, technologists, and cultural commentators inquired into the features of digital technologies that distinguish them from earlier technology, the forces that produce such pernicious effects, and what can be done to ameliorate our relationship with technology to reap its benefits without enabling its pathologies.

The dominant analysis has been focused on the relationship between these technologies and human attention.<sup>13</sup> The specifics vary, but the basic argument is as follows:

- Digital services directly and indirectly generate revenues from attention. Direct attention-generated revenue comes from digital advertising, while indirect attention-generated revenue comes from converting attention into a transaction for goods or services.
- Generating attention digitally requires historically low marginal costs. Vast markets can be reached instantaneously and with minimal labor and capital input.
- Such attention is, however, difficult to sustain. As a result, digital services must manipulate human attention in order to (1) acquire a greater share of any one hypothetical customer’s attention and (2) increase the total share of attention available.
- In essence, these services compete in an attention market. They want as much of the time you already spend on your device as they can get, and they are working to keep you on your device longer and longer.
- The imperative of this attention economy is, therefore, to increase the availability and acquisition of human attention at all costs.

This analysis persuasively explains many of the essential mechanics of digital businesses, both those that are dependent on advertising and those that sell goods and services by competing through their “social” features (the ability to “like,” “share,” “follow,” generate new content, and so on). It also appeals to our moral outrage with regard to the negative consequences of digital technology, provoking indignation at the psychological techniques used to manipulate our attention by modifying our behavior.

But one of the consistently overlooked issues in this transformation—one brought into clear focus by the “creator economy”—is the way digital services operators changed the categories of social and economic transactions. In a sense, this is their greatest invention. Facebook redefined “community” as an algorithmically managed digital information and content network and “friends” as users of this network.<sup>14</sup> Uber redefined “vehicle for hire” services (taxis) as a technology service whose customers are both riders and drivers.<sup>15</sup> Airbnb performed the same trick with

---

12. There is no shortage of examples. Among the most cited: (Haidt 2022; Khan 2017; Twenge 2017; and Tufekci 2017).

13. Three prominent works on this issue include Zuboff (2019); Wu (2016); and Cohen (2019).

14. Meta’s corporate mission: “Our mission is to give people the power to build community and bring the world closer together” (Meta Platforms, Inc. 2023).

15. Uber’s corporate mission: “Uber Technologies, Inc. (‘Uber,’ ‘we,’ ‘our,’ or ‘us’) is a technology platform that uses a massive network, leading technology, operational excellence and product expertise to power movement from point A to point B. [...] We connect consumers (‘Rider(s)’ with independent providers of ride services (‘Mobility Driver(s)’ for ridesharing services, and connect Riders and other consumers (‘Eater(s)’ with restaurants, grocers and other stores (collectively, ‘Merchants’) with delivery service providers (‘Couriers’) for meal preparation, grocery and other delivery services. Riders and Eaters are collectively referred to as ‘end-user(s)’ or ‘consumer(s).’ Mobility Drivers and Couriers are collectively referred to as ‘Driver(s)’” (Uber Technologies, Inc. 2022).

“lodging.”<sup>16</sup> Each one of these businesses proceeded to devour the markets of leading incumbents, all while vociferously protesting to regulators (and other critics) that they weren’t in the same business at all (i.e., Facebook: “We are not a publisher”; Uber: “We are not a taxi service”; Airbnb: “We are not a hotel operator”).

What is so insidious about these semantic maneuvers is that they divorce services from the public benefits with which they have traditionally been associated and regulated. So when executives and founders in Silicon Valley talk endlessly about removing what they call friction, they are referring not only to the brute operating efficiency of a service, but also to the efficiency—or rather inefficiency—of ethical constraints. When Uber displaces taxis, the dispatch system isn’t the only thing they wipe out. They also evade institutional protections for drivers as labor and passengers as customers. The obsessive talk within technology companies about “governance” with regard to their services is little more than an analytically and bureaucratically convoluted exercise to reinstate the moral and ethical considerations they had previously eradicated. Governance discourse is intended to delude people—or perhaps to convince the companies themselves—into believing that the only legitimate form of restraint can come from within.

**The creator economy—and the elision of “artist” and “creator”—is the latest category shift that is fundamentally reshaping not just the economic structure of markets, but their social and political character as well.**

The creator economy—and the elision of “artist” and “creator”—is the latest category shift that is fundamentally reshaping not just the economic structure of markets, but their social and political character as well. Web 2.0 social media changed how we consume information. What many of us didn’t realize is that changing the mode of information transmission also meant changing what counts as knowledge.

We can also see how the creator economy is changing what is art. As discussed here, it may just change art “all the way down,” to the point that what constitutes a creative act is shaped from conception by digital business imperatives and operated “autonomously” through generative digital neural networks. Confronting this still nascent rupture in the arts can help us to confront the chasms that we face when it comes to knowledge and social experience—two broad dimensions of human existence that already have been profoundly altered.

## Where Do We Go from Here?

We believe the time is overdue for introspection and discussion within the arts and culture community about the digitization of the arts, and within the growing community of socio-technical researchers and practitioners about what the arts can teach us about the consequences of digitization more broadly. Here are some questions to get started:

*For artists and arts-presenting organizations:*

- What will enable greater visibility of digital capitalism in the arts? How can we encourage and strengthen “class consciousness” in cultural production?
- Can the productive and potentially inclusive possibilities of digital technology be harnessed without further entrenching an extractive digital political economy?

---

16. Airbnb’s corporate mission: “Airbnb is a community based on connection and belonging—a community that was born in 2007 when two hosts welcomed three guests to their San Francisco home, and has since grown to 4 million hosts who have welcomed over 800 million guest arrivals to approximately 100,000 cities in almost every country and region across the globe. [...] We intend to make long-term decisions considering all of our stakeholders because their collective success is key for our business to thrive” (Airbnb, Inc. 2022).

- How can aesthetic discernment be preserved without aiding and abetting historic systems of aesthetic exclusion?
- What are morally appropriate forms of engagement with technology operators? When do operators cross the line from having different but potentially complementary incentives to becoming the Sacklers of digital pollution?

*For scholars and critics:*

- Have scholars and critics been missing the forest for the trees? That is, have they been too focused on the individual sites of digital discontinuity (information, political organizing, commerce) that they have failed to take note of the larger digital capitalist process, which is agnostic to systems of classification embedded within contemporary society?
- Have scholars and critics accepted the anti-institutionalism of digital capitalism as inevitable or even desirable, thereby ceding to digital capitalism the final—and often triumphal—word on institutional norms?
- Can the traditional institutionally located function of aesthetic discernment exist in the digital political economy?

Perhaps most fundamentally, how can we challenge at inception the changes in social categories promoted by digital platforms? That is, stop these changes before they are inscribed in the economy? In other words, how can we move more slowly and avoid breaking quite so many things?

## References

- Airbnb, Inc. 2022. Form 10-K. 25 February. [www.sec.gov/Archives/edgar/data/1559720/000155972022000006/abnb-20211231.htm](http://www.sec.gov/Archives/edgar/data/1559720/000155972022000006/abnb-20211231.htm)
- Altman, Sam. 2021. *Moore's Law for Everything*. 16 March. [moores.samaltman.com/](http://moores.samaltman.com/)
- Anthropic. n.d. "Prompt Engineer and Librarian." *Jobs.Lever.co*. [jobs.lever.co/Anthropic/e3cde481-d446-460f-b576-93cab67bd1ed](https://jobs.lever.co/Anthropic/e3cde481-d446-460f-b576-93cab67bd1ed)
- Auden, W.H. (1962) 1963. *The Dyer's Hand and Other Essays*. Faber and Faber.
- Augé, Marc. (1992) 2009. *Non-Places: An Introduction to Supermodernity*. Trans. John Howe. Verso.
- Bärtl, Mathias. 2018. "YouTube Channels, Uploads and Views: A Statistical Analysis of the Past 10 Years." *Convergence: The International Journal of Research into New Media Technologies* 24, 1:16–32. [doi.org/10.1177/1354856517736979](https://doi.org/10.1177/1354856517736979)
- Benjamin, Walter. (1935) 1969. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn. [web.mit.edu/allanmc/www/benjamin.pdf](http://web.mit.edu/allanmc/www/benjamin.pdf).
- boyd, danah, and Alice Marwick. 2014. "'It's Just Drama': Teen Perspectives on Conflict and Aggression in a Networked Era." *Journal of Youth Studies* 17, 9:1187–1204. [doi.org/10.1080/13676261.2014.901493](https://doi.org/10.1080/13676261.2014.901493)
- Browne, Simone. 2015. *Dark Matters: On the Surveillance of Blackness*. Duke University Press.
- Brueggemann, Tom. 2022. "The Average Movie Ticket Price Is Now \$11. Why Is That a Secret?" *IndieWire*, 4 October. [www.indiewire.com/2022/10/movie-ticket-price-average-11-dollars-1234765924/](http://www.indiewire.com/2022/10/movie-ticket-price-average-11-dollars-1234765924/)
- Buolamwini, Joy. n.d. "About." *Algorithmic Justice League*. [www.ajl.org/about](http://www.ajl.org/about)
- Carroccio, Bennett. 2020. "The Stickiest, Most Addictive, Most Engaging, and Fastest-Growing Social Apps—and How to Measure Them." *Andreessen Horowitz*, 7 December. [a16z.com/2020/12/07/social-strikes-back-fastest-growing-apps/](https://a16z.com/2020/12/07/social-strikes-back-fastest-growing-apps/)
- Cascone, Sarah. 2023. "The Company Behind the Wildly Popular 'Immersive Van Gogh' Experience Has Filed for Bankruptcy." *Artnet News*, 1 August. [news.artnet.com/art-world/immersive-van-gogh-company-bankruptcy-2342502](https://news.artnet.com/art-world/immersive-van-gogh-company-bankruptcy-2342502)
- CB Insights. 2021. "The Creator Economy Explained: How Companies Are Transforming The Self-Monetization Boom." *CB Insights*, 15 June. [www.cbinsights.com/research/report/what-is-the-creator-economy/](http://www.cbinsights.com/research/report/what-is-the-creator-economy/)

- Chayka, Kyle. 2016. "Welcome to AirSpace: How Silicon Valley Helps Spread the Same Sterile Aesthetic Across the World." *The Verge*, 3 August. [www.theverge.com/2016/8/3/12325104/airbnb-aesthetic-global-minimalism-startup-gentrification](http://www.theverge.com/2016/8/3/12325104/airbnb-aesthetic-global-minimalism-startup-gentrification)
- Chayka, Kyle. 2021. "What the 'Creator Economy' Promises—and What It Actually Does." *The New Yorker*, 17 July. [www.newyorker.com/culture/infinite-scroll/what-the-creator-economy-promises-and-what-it-actually-does](http://www.newyorker.com/culture/infinite-scroll/what-the-creator-economy-promises-and-what-it-actually-does)
- Chayka, Kyle. 2023a. "Is A.I. Art Stealing from Artists?" *The New Yorker*, 10 February. [www.newyorker.com/culture/infinite-scroll/is-ai-art-stealing-from-artists](http://www.newyorker.com/culture/infinite-scroll/is-ai-art-stealing-from-artists)
- Chayka, Kyle. 2023b. "Generative AI and the Death of the Artist: Automatic Art-Making." *Kyle Chayka Industries*, 26 February. [kylechayka.substack.com/p/generative-ai-and-the-death-of-the-utm\\_source=substack&utm\\_medium=email](http://kylechayka.substack.com/p/generative-ai-and-the-death-of-the-utm_source=substack&utm_medium=email)
- Chiang, Ted. 2023. "ChatGPT Is a Blurry JPEG of the Web." *The New Yorker*, 9 February. [www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-jpeg-of-the-web](http://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-jpeg-of-the-web)
- Chotiner, Isaac. 2019. "The Underworld of Online Content Moderation." *The New Yorker*, 5 July. [www.newyorker.com/news/q-and-a/the-underworld-of-online-content-moderation](http://www.newyorker.com/news/q-and-a/the-underworld-of-online-content-moderation)
- Citron, Danielle K., and Mary Anne Franks. 2020. "The Internet as a Speech Machine and Other Myths Confounding Section 230 Reform." *The University of Chicago Legal Forum* 2020, 1/3:45–75. [chicagounbound.uchicago.edu/uclf/vol2020/iss1/3/](http://chicagounbound.uchicago.edu/uclf/vol2020/iss1/3/)
- Cohen, Julie E. 2019. *Between Truth and Power: The Legal Constructions of Informational Capitalism*. Oxford University Press.
- Dilenschneider, Colleen. 2022. "The Pandemic Has Shifted the Types of Cultural Entities That People Prefer to Visit (DATA)." *Impacts Experience*, 10 May. [www.colleendilen.com/2022/05/10/the-pandemic-has-shifted-the-types-of-cultural-entities-people-prefer-to-visit-data/](http://www.colleendilen.com/2022/05/10/the-pandemic-has-shifted-the-types-of-cultural-entities-people-prefer-to-visit-data/)
- Eichhorn, Kate. 2022. *Content*. The MIT Press.
- Eubanks, Virginia. 2017. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. St. Martin's Press.
- Failing, Patricia. 2021. "How Top U.S. Art Museums Excluded Black Artists During the 1980s: From the Archives." *ARTnews*, 14 January. [www.artnews.com/art-news/retrospective/black-artists-exclusion-museums-1980s-1234581315/](http://www.artnews.com/art-news/retrospective/black-artists-exclusion-museums-1980s-1234581315/)
- Farber, Dan. 2013. "CNN's Jeff Zucker Trades Analog Dollars for Digital Quarters." *CNET*, 23 July. [www.cnet.com/tech/services-and-software/cnns-jeff-zucker-trades-analog-dollars-for-digital-quarters/](http://www.cnet.com/tech/services-and-software/cnns-jeff-zucker-trades-analog-dollars-for-digital-quarters/)
- Fernandez, Marissa. 2020. "Mark Zuckerberg: Social Networks Should Not Be the 'Arbiter of Truth.'" *Axios*, 28 May. [www.axios.com/2020/05/28/mark-zuckerberg-fact-check-twitter-facebook](http://www.axios.com/2020/05/28/mark-zuckerberg-fact-check-twitter-facebook)
- Giblin, Rebecca, and Cory Doctorow. 2022. *Chokepoint Capitalism: How Big Tech and Big Content Captured Creative Labor Markets and How We'll Win Them Back*. Beacon.
- Haidt, Jonathan. 2022. "Why the Past 10 Years of American Life Have Been Uniquely Stupid." *The Atlantic*, 11 April. [www.theatlantic.com/magazine/archive/2022/05/social-media-democracy-trust-babel/629369/](http://www.theatlantic.com/magazine/archive/2022/05/social-media-democracy-trust-babel/629369/)
- Hasen, Richard L. 2022. *Cheap Speech: How Disinformation Poisons Our Politics—and How to Cure It*. Yale University Press.
- Herrman, John. 2022. "AI Art Is Here and the World Is Already Different." *New York Magazine*, 19 September. [nymag.com/intelligencer/2022/09/ai-art-is-here-and-the-world-is-already-different.html](http://nymag.com/intelligencer/2022/09/ai-art-is-here-and-the-world-is-already-different.html)
- Hesmondhalgh, David, Richard Osborne, Hyojung Sun, and Kenny Barr. 2021. "Music Creators' Earnings in the Digital Era." *Intellectual Property Office Research Paper Forthcoming*. [dx.doi.org/10.2139/ssrn.4089749](https://dx.doi.org/10.2139/ssrn.4089749)
- Howard, Theresa Ruth. 2018. "Is Instagram Changing the Dance World's Value System?" *Dance Magazine*, 15 July. [www.dancemagazine.com/social-media-and-dance](http://www.dancemagazine.com/social-media-and-dance)
- Lin, Li. 2019. "The Passion Economy and the Future of Work." *Andreessen Horowitz*, 8 October. [a16z.com/2019/10/08/the-passion-economy-and-the-future-of-work/](http://a16z.com/2019/10/08/the-passion-economy-and-the-future-of-work/)

- Jin, Li. 2020. "The Creator Economy Needs a Middle Class." *Harvard Business Review*, 17 December. [hbr.org/2020/12/the-creator-economy-needs-a-middle-class](https://hbr.org/2020/12/the-creator-economy-needs-a-middle-class)
- Johnson, Emily. 2023. *Decolonization Rider*. Catalyst Dance. [www.catalystdance.com/decolonization-rider](http://www.catalystdance.com/decolonization-rider)
- Kang, Jay Caspian. 2022. "The Boy King of YouTube." *The New York Times Magazine*, 5 January. [www.nytimes.com/2022/01/05/magazine/ryan-kaji-youtube.html](https://www.nytimes.com/2022/01/05/magazine/ryan-kaji-youtube.html)
- Khan, Lina M. 2017. "Amazon's Antitrust Paradox." *The Yale Law Journal* 126, 3 (January):710–805.
- Klonick, Kate. 2018. "The New Governors: The People, Rules, and Processes Governing Online Speech." *Harvard Law Review* 131, 6:1598–670. [harvardlawreview.org/print/vol-131/the-new-governors-the-people-rules-and-processes-governing-online-speech/](https://harvardlawreview.org/print/vol-131/the-new-governors-the-people-rules-and-processes-governing-online-speech/)
- Lee, Yin Harn, Emily Laidlaw, and Daithi Mac Sithigh. 2015. "Copyright and Freedom of Expression: A Literature Review." CREATe Working Paper Series, May. [doi.org/10.5281/zenodo.18132](https://doi.org/10.5281/zenodo.18132)
- Lessig, Lawrence. 2008. *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. Bloomsbury Academic.
- Lorenz, Taylor. 2021. "Young Creators Are Burning Out and Breaking Down." *New York Times*, 8 June. [www.nytimes.com/2021/06/08/style/creator-burnout-social-media.html](https://www.nytimes.com/2021/06/08/style/creator-burnout-social-media.html)
- Mack, Zachary. 2019. "How Streaming Affects the Lengths of Songs." *The Verge*, 28 May. [www.theverge.com/2019/5/28/18642978/music-streaming-spotify-song-length-distribution-production-switched-on-pop-vergecast-interview](https://www.theverge.com/2019/5/28/18642978/music-streaming-spotify-song-length-distribution-production-switched-on-pop-vergecast-interview)
- Marx, Karl. (1867) 1990. *Capital: A Critique of Political Economy, Volume I*. Trans. Ben Fowkes. Penguin.
- McEntee, Billy. 2020. "Instagram: A New Casting Platform, or Another Anxiety Source for Actors?" *American Theatre*, 7 February. [www.americantheatre.org/2020/02/07/instagram-a-new-casting-platform-or-another-anxiety-source-for-actors/](https://www.americantheatre.org/2020/02/07/instagram-a-new-casting-platform-or-another-anxiety-source-for-actors/)
- Mejía, Paula. 2019. "The Success Of Streaming Has Been Great For Some, But Is There A Better Way?" *NPR*, 22 July. [www.npr.org/2019/07/22/743775196/the-success-of-streaming-has-been-great-for-some-but-is-there-a-better-way](https://www.npr.org/2019/07/22/743775196/the-success-of-streaming-has-been-great-for-some-but-is-there-a-better-way)
- Meta Platforms, Inc. 2023. 2022 Form 10-K, 2 February. [www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm](https://www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm)
- Moore, Rachel. 2021. "COVID-19 Impacted the Technology & Performing Arts Relationship: Are the Arts Ready?" *C-Suite Quarterly*, 4 May. [csq.com/2021/05/c-suite-thought-leader-rachel-moore-covid-19-impacted-the-technology-performing-arts-relationship/#.ZD3TDHbMIuV](https://csq.com/2021/05/c-suite-thought-leader-rachel-moore-covid-19-impacted-the-technology-performing-arts-relationship/#.ZD3TDHbMIuV)
- Musk, Elon. 2022. "Voc Populi, Vox Dei." X, 18 November. [x.com/elonmusk/status/1593769469741932544?s=20](https://x.com/elonmusk/status/1593769469741932544?s=20)
- Nakamura, Lisa. 2002. *Cybertypes: Race, Ethnicity, and Identity on the Internet*. Routledge.
- Noble, Safiya Umoja. 2018. *Algorithms of Oppression: How Search Engines Reinforce Racism*. NYU Press.
- NPR. 2017. "Yayoi Kusama: Infinity Mirrors | Arts | NPR." YouTube, 1 March. [www.youtube.com/watch?v=8VwJmW\\_fLVI](https://www.youtube.com/watch?v=8VwJmW_fLVI)
- Paulsen, Michael, and Javier C. Hernández. 2022. "Live Performance Is Back. But Audiences Have Been Slow to Return." *New York Times*, 22 August. [www.nytimes.com/2022/08/21/arts/performing-arts-pandemic-attendance.html](https://www.nytimes.com/2022/08/21/arts/performing-arts-pandemic-attendance.html)
- Persily, Nathaniel, and Joshua A. Tucker, eds. 2020. *Social Media and Democracy: The State of the Field, Prospects for Reform*. Cambridge University Press. [doi.org/10.1017/9781108890960](https://doi.org/10.1017/9781108890960)
- Quintais, João Pedro, and Joost Poort. 2019. "The Decline of Online Piracy: How Markets - Not Enforcement - Drive Down Copyright Infringement." *American University International Law Review* 34, 4:807–76. [digitalcommons.wcl.american.edu/auilr/vol34/iss4/5](https://digitalcommons.wcl.american.edu/auilr/vol34/iss4/5)
- Roberts, Sarah T. 2021. *Behind the Screen: Content Moderation in the Shadows of Social Media*. Yale University Press.
- Rodriguez, Ashley. 2017. "Netflix Divides its 93 Million Users Around the World into 1,300 'Taste Communities.'" *Quartz*, 22 March. [qz.com/939195/netflix-nflx-divides-its-93-million-users-around-the-world-not-by-geography-but-into-1300-taste-communities](https://qz.com/939195/netflix-nflx-divides-its-93-million-users-around-the-world-not-by-geography-but-into-1300-taste-communities)

- Rodríguez, Lázaro Gabino. 2021. "Open letter to Jerome Bel." *Somos Reclamos*, 12 February. Trans. Juan Francisco Maldonado. [somosreclamos.blogspot.com/2021/02/open-letter-to-jerome-bell.html](https://somosreclamos.blogspot.com/2021/02/open-letter-to-jerome-bell.html)
- Rosenblat, Alex. 2018. "When Your Boss Is an Algorithm." *New York Times*, 12 October. [www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html](https://www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html)
- Salkowitz, Rob. 2022. "Midjourney Founder David Holz on the Impact of AI on Art, Imagination and the Creative Economy." *Forbes*, 16 September. [www.forbes.com/sites/robsalkowitz/2022/09/16/midjourney-founder-david-holz-on-the-impact-of-ai-on-art-imagination-and-the-creative-economy/?sh=eef41e2d2b89](https://www.forbes.com/sites/robsalkowitz/2022/09/16/midjourney-founder-david-holz-on-the-impact-of-ai-on-art-imagination-and-the-creative-economy/?sh=eef41e2d2b89)
- Sanchez, Daniel. 2018. "96.5% of YouTubers Don't Earn Enough to Cross the Poverty Line, Study Finds." *Digital Music News*, 27 February. [www.digitalmusicnews.com/2018/02/27/youtube-top-creators-revenue/#:~:text=According%20to%20research%20from%20Germany,povetry%20line%20in%20the%20US](https://www.digitalmusicnews.com/2018/02/27/youtube-top-creators-revenue/#:~:text=According%20to%20research%20from%20Germany,povetry%20line%20in%20the%20US)
- Shotwell, James. 2019. "How Many Spotify Streams Do You Need to Live Above the Poverty Line?" *Haulix*, 12 December. [haulixdaily.com/2019/12/spotify-streams-poverty](https://haulixdaily.com/2019/12/spotify-streams-poverty)
- Statt, Nick. 2017. "YouTube Is Facing a Full-Scale Advertising Boycott Over Hate Speech: The Biggest Brands Continue to Leave." *The Verge*, 24 March. [www.theverge.com/2017/3/24/15053990/google-youtube-advertising-boycott-hate-speech](https://www.theverge.com/2017/3/24/15053990/google-youtube-advertising-boycott-hate-speech)
- Thompson, Ben. 2022. "Instagram, TikTok, and the Three Trends." *Stratechery*, 16 August. [stratechery.com/2022/instagram-tiktok-and-the-three-trends/](https://stratechery.com/2022/instagram-tiktok-and-the-three-trends/)
- Tufekci, Zeynep. 2017. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. Yale University Press.
- Twenge, Jean M. 2017. "Have Smartphones Destroyed a Generation?" *The Atlantic*, 15 September. [www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/](https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/)
- twiml. 2022. "Stable Diffusion & Generative AI with Emad Mostaque." twiml, 12 December. [twimlai.com/podcast/twimlai/stable-diffusion-generative-ai/](https://twimlai.com/podcast/twimlai/stable-diffusion-generative-ai/)
- Uber Technologies, Inc. 2022. 2021 Form 10-K, 2 February. [s23.q4cdn.com/407969754/files/doc\\_financials/2022/ar/2021-Annual-Report.pdf](https://s23.q4cdn.com/407969754/files/doc_financials/2022/ar/2021-Annual-Report.pdf)
- Vaidhyanathan, Siva. 2001. *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*. NYU Press.
- Vaidhyanathan, Siva. 2011. *The Googlization of Everything: (And Why We Should Worry)*. University of California Press.
- Vincent, James. 2022. "'An Engine for the Imagination': The Rise of AI Image Generators." *The Verge*, 2 August. [www.theverge.com/2022/8/2/23287173/ai-image-generation-art-midjourney-multiverse-interview-david-holz](https://www.theverge.com/2022/8/2/23287173/ai-image-generation-art-midjourney-multiverse-interview-david-holz)
- Wingenroth, Lauren. 2022. "Emily Johnson: A Catalyst for Art, Action & Promoting Indigenous Identity." *Dance Magazine*, 18 August. [www.dancemagazine.com/emily-johnson/](https://www.dancemagazine.com/emily-johnson/)
- Woodbury, Rex. 2022. "Digitally-Native Jobs, Self-Employment, and the Antiwork Movement: The Revolution Happening in How We Work." *Digital Native*, 27 April. [digitalnative.substack.com/p/digitally-native-jobs-self-employment](https://digitalnative.substack.com/p/digitally-native-jobs-self-employment)
- Woodbury, Rex. 2023. "The New Avengers: How AI Is Giving Us Superpowers." *Digital Native*, 29 March. [digitalnative.substack.com/p/the-new-avengers-how-ai-is-giving?utm\\_source=substack&utm\\_medium=email](https://digitalnative.substack.com/p/the-new-avengers-how-ai-is-giving?utm_source=substack&utm_medium=email)
- Wright, Stephen. n.d. *Toward a Lexicon of Usership*. Arte Útil. [www.arte-util.org/tools/lexicon/](https://www.arte-util.org/tools/lexicon/)
- Wu, Tim. 2016. *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*. Alfred A. Knopf.
- Yuan, Yuanling, and Josh Constine. n.d. "SignalFire's Creator Economy Market Map." *SignalFire*. [signalfire.com/blog/creator-economy/](https://signalfire.com/blog/creator-economy/)
- Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Public Affairs.

### **TDRreadings**

Auslander, Philip. 2001. "Looking at Records." *TDR* 45, 1 (T169):77–83. doi.org/10.1162/105420401300079059

Dorsen, Annie. 2019. "Plato, Procedures, and Artificial Everything." *TDR* 63, 4 (T244):113–20. doi.org/10.1162/dram\_a\_00878

Jucan, Ioana B. 2015. "sys.begin to sys.exit: Software Performs *A Piece of Work*." *TDR* 59, 4 (T228):149–68. doi.org/10.1162/DRAM\_a\_00502

Wojnowski, Konrad. 2019. "Capturing the World with Performance: John Cage's Probabilistic Aesthetics for the Digital Age." *TDR* 63, 4 (T244):33–56. doi.org/10.1162/dram\_a\_00873