Rethinking Creative Labor: A Sociotechnical Examination of Creativity & Creative Work on TikTok

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ABSTRACT

Social media platform success relies on users to consume, create, and share creative content. While some creatives aspire to become influencers, this is not the goal of all creatives, particularly those with smaller audiences. Through an interview study of 15 creatives on TikTok, we explore he often overlapping intentions for creating and sharing videos, as well as the challenges to maintaining these creative intentions and routines as they are shaped by platform infrastructural logic. We find platforms introduce impediments which disrupt people's creative routines and alienate people from their overlapping creative intentions; introducing challenges which alienate people from their sense of self, and their audiences. We construct a broader definition of creative labor - the work of professionalizing and monetizing a creative product shared on social media - reflecting on how the routine enactment of creative labor is impacted by infrastructural elements of technology.

KEYWORDS

creative labor, infrastructure, tiktok, content creation, creativity

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1 INTRODUCTION

> *"Since my brother died, I've done a lot of stuff on like, dealing with grief [...] so I definitely have started to embody, like, the dark humor about trauma. And it resonates with other people who feel those things and it makes them feel seen."*—P6, 29

People are no longer simply consumers of content online, rather, they participate in the co-creation of online platforms and the experiences they have on them through the creative work they do on them [13, 39, 66]. The user-generated content (UGC) individuals produce and share is a value-adding practice for online platforms, serving as the primary draw for users [5]. UGC provides revenue to online platforms in the form of ad views, however UGC is largely produced without the intent to receive remuneration by end-users. There is a common belief that people who create "content" and share it on online social spaces are largely doing it "for the likes"—the metric-based measures of creative success [9, 26, 53]. The inspirational, rags-to-riches beat of news stories about online content creators–*creatives*–who have found acclaim and celebrity by doing producing UGC–doing *creative work*–and monetizing it platforms like YouTube, Instagram, or TikTok, sells a narrative the only reason people do creative work online is to make money [72]. Yet, for some small-scale creatives, like P6 quoted above, who scripts, films, and produces videos on TikTok about surviving suicide, the intention behind creating these videos is not receiving attention and acclaim, but to help cope with their grief and help others cope with theirs.

The free labor of online creatives is often framed in research as creative labor–the work of professionalizing and monetizing their creative product [19]–such as YouTube personalities or Instagram influencers who have professionalized their media production into careers [47, 49, 67, 69, 73]. Our research, however, is concerned with the majority of platform users who create and share creative work—consumable media—for fun or social purposes, rather than as their primary source of income [67]. Our work shifts attention to smaller-scale approaches to creative work that are often not well supported by platforms. How might people's intentions for creating UGC might come into conflict platform ideals of what "creative labor" means? Beyond the work needed to produce creative work with an intended purpose, we argue there is an additional layer of work online creatives must contend with that conflicts with these intentions. A video must be not only a creative product, but a creative product constructed and shared within the limitations of the platform's revenue-generating structures and norms around success, where success is largely focused on the primary goals of monetization and professionalization [47, 53]. While prior work examines how the work to ensure the visibility of creative work on platforms shapes and alters a person's creative process and projects [26], we extend this work through an examination of the intentions individuals have behind their routine creative work and how these intentions are shaped by platform logics - "the norms, strategies, mechanisms, and economies" that underpin a platform's functionality [68] beyond the lens of visibility to focus on creativity more broadly. We examine how these creative routines and intentions challenge the current definitions of creative labor.

To re-examine these definitions, we explore content production as a form of creative work on TikTok. The Pew Research Center recently reported that 67% of teens use TikTok [70], and the platform is popular globally [35], making it a key platform for creatives. TikTok recommends videos creatives make and share to viewers "for them" via an algorithm where 'them' is based on a version of the

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user constructed entirely out of their trace data [59], at times almost appearing "to read the viewer's mind" [61]. To support and encourage creatives to use the platform, TikTok has a creator fund which provides monetization options for creatives. This fund does not provide enough funding for most creatives to financially support their creative endeavors [32, 57], yet TikTok is still a popular place for creatives to produce, showcase, and engage in creative work. Given that predominately free creative labor sustains online platforms, what are the intentions creatives have around creation and where do platforms enable or constrain this labor beyond ensuring that creative work is visible [1, 26] and digestable [8, 47]?

Beyond the monetization of their work, creatives can have complex and often overlapping intentions behind why they create. Prior research on creative work in online spaces has shown other intended purposes, such as identity exploration [29], collective sensemaking during times of conflict [3], or though constructing creative narratives to repair identities fractured by centuries of colonization for South Asians [21]. This paper presents an interview study with 15 TikTok creatives, unpacking their intentions for creating and sharing their creative work on TikTok and where TikTok's platform logics shape these intentions and the labor of creation. We note that these participants all have other jobs, and TikTok is not their primary source of income. We find participants struggled with infrastructural elements of TikTok, which presented challenges to the intentions they had behind their routine creative practices. Platforms, in how they mediate creative labor, shift people's creative work away from their original and overlapping intentions to focus more on the labor involved in being a creative on these platforms. We discuss how these disruptions and the additional labor of adapting creative routines to them, alienate our participants from their creative work, their intentions for producing creative products, their audiences, and, in some cases, from their sense of self. We contribute a broader definition of creative labor that accounts for how creative routines and intentions are shaped by and through platform infrastructural logics. With this new definition, a person's relationship with their creativity and creative work is accounted for when discussing the creative labor they do on online platforms.

2 RELATED WORK

In this section we discuss related work, first describing routines and how infrastructures support them. We then discuss the when and where of creativity, examining current literature on creative labor. Finally, we overview routine creative work in online spaces before briefly examining creative work on TikTok.

2.1 Routines as Supported by Infrastructures

Humans are creatures of habit, we tend to do the same things, even if we do them slightly differently than other people, as a matter of routine. Routines are patterns of behavior or actions carried out by one or multiple actors within a specific context [31]. These patterns are recognizable when observed [31], and are adaptable and function outside of the behavioral rules and norms of society [51]. People have the agency to adapt their existing routines or create new ones as they are independent patterns of actions that can be understood as a system [51]. Within these systems there are two interacting parts: the ostensive and the performative [51]. The ostensive is the higher-level understanding of these specific patterns of action that serves as a guide to the specific performance of routines, whereas the performative is the contextual enactment of a routine by specific people at specific times in specific places [51, 55]. How people perform any given routine pattern of actions or behavior depends on context: they may do things differently based on who and where they are, and what their goals might be.

Going about our everyday routines, we often draw on infrastructures – the underlying, foundational structures of any large-scale system which supports routine societal functions [30, 55]. Infrastructures often evoke images of large-scale projects like road systems or wireless networks, however, information and communication technologies are also forms of infrastructure [34]. These *information infrastructures* consist of information systems like databases, as well as internet-enabled systems like social media platforms, that allow a userbase to use the information services they provide [34]. These information infrastructures have become integral parts of routine communication, collaboration, and connection with dispersed others, allowing people to access and produce information across multiple social and cultural contexts.

Infrastructures are sociotechnical systems that shape and are shaped by social practices [30, 62]. Therefore, infrastructure is defined in its use–it takes on meaning or changes in meaning depending on the social practice taking place and the actors involved. It is a continually negotiated relationship between the people and contexts involved; infrastructures are relational systems [62]. The human element of these relational systems, the *human infrastructure*, or "the arrangements of organizations and actors that must be brought into alignment in order for work to be accomplished" allows the work of our everyday routines to take place as it both maintains and animates the infrastructures that allow societies to function [44]. Human infrastructures are not social networks, but rather a combination of both known and unknown entities [44].

Routines are systems actions that are enacted on, through, and within larger infrastructural systems. This paper focuses on creativity and creative work and how creatives draw on digital infrastructures to enact their ostensible and performative routines around creativity. In the next section, we discuss our definition of creativity, and how creative routines draw on digital infrastructures.

2.2 When and Where is Creativity?

Understanding creativity generally is challenging because it is an intangible thing, yet we experience it in our everyday lives. That striking piece of pottery in a shop window, the latest TikTok dance craze that seems to blend four distinct dance styles: the work of creatives, with their creativity on full display, is all around us. Csikszentmihalyi [20] suggests a better way to understand creativity is to not focus on what it is, but rather, where it is: embedded in social and historical context. For example, a dance that blends multiple cultural styles into one fluid routine on TikTok may draw on the choreographer's cultural heritage, where they live, or even what dance classes they've taken.

In theorizing creativity through the lens of where it is, Csikszentmihalyi draws on Bourdieu's concept of the field of cultural production [12]. Fields are structured - if metaphorical - spaces organized around specific types of power or combinations of power, where

actors negotiate and contest unequal distributions of power, as well as the definition of what sorts of power are most valued [11, 12]. Bourdieu views power as created both culturally and symbolically, and continually re-legitimated through the interplay of concepts of agency and structure [11]. Culturally and socially situated notions of power help elucidate the role of and value that society places on creative work. Creativity emerges in how creative work is valued within a particular social, cultural, or historical context. People know creativity "when and where they see it" [20], meaning that others, not the artist themselves, have the power to situate creative work and its value within the field of cultural production, relative to their cultural, social, and historical background.

In both cultural and media studies, where a creative worker is known as a cultural producer [53], the field of cultural production is set within two oppositional subfields of power: the field of restricted production and the field of large-scale production [12]. Restricted production refers to the production of what is generally considered "fine art" – it is produced for the producers and is generally discouraged from being economically profitable [12]. Conversely, large-scale production refers to mass or popular culture, sustained by a cultural industry and focused on profit [12]. Creatives on social media fall into the latter category. Cultural producers are "the broad range of actors and organizations engaged in the creation, distributing, marketing and monetization of symbolic artifacts" [53, p. 9]. Labor is intrinsically embedded in the concept of making, sharing, and selling symbolic cultural artifacts. The creative aspect of this work comes in the fact that these artifacts exist within the field of large-scale production–*popular culture*.

Traditionally, the study of cultural producers focused on the work of newspapers, film and television producers, or game publishers. Recently, however, there has been a departure from "industrial" cultural production to a more individual form in online contexts [53]. With the rise of digital infrastructures that depend on the routine production of UGC to produce and support their platforms (e.g. YouTube or Instagram), individuals are now free to become cultural producers. This places vernacular creativity - the "everyday practices of material and symbolic creativity" - in the hands of ordinary people [14]. These acts often generate value for the platform in ad revenue but are performed for free by end-users [64]. Artisans, craftspeople, and designers, as well as writers, illustrators, and some tradespeople, are all collectively known as "creatives" - people who are creative, usually in a professional context, although not always. Hobbyists often engage in the same creative work but do it for fun. For the purposes of this paper, we are choosing to group creatives and hobbyists together, as the distinction between them on social media is increasingly blurred [27, 47, 53].

2.3 Routine Creative Labor & Platform Logics

Creatives engage in acts of cultural production as they routinely create, share, market, and potentially monetize their creative works while drawing on platform infrastructures [53]. We are interested in how creatives draw on digital infrastructures to create, engage in, and adapt their creative routines. How do these infrastructures support – or do not support – creatives' intentions and routines around their creative work?

These practices are a form of vernacular creativity–cultural production in the hands of ordinary people–that people engage in as a part of their everyday creative practices [14], and are ostensive routines. Creative routines help people articulate particular identities, such as fathers running Do-it-Yourself parenting blogs that allow them to articulate their identities through the confluence of material and cultural co-production [4]. Creative routines are ordinary, repeated patterns of action around creative practices that rely on both the creativity of the individual, but also on the invisible infrastructures that support these routines [62].

When the infrastructures people draw on to mediate creative routines change or break down, they become visible; pushing people to try to resolve these breakdowns. For creatives using online platforms, breakdowns can become a normal part of their creative routines, as much of their work takes place within constantly-shifting platform environments [8, 53]. We believe that platforms, in how they mediate creative labor around top-down normative expectations, have shifted people's creative work away from their intentions behind doing this work. Creatives have complex and often overlapping intentions behind what they create on a given platform, yet the value of creative work people do is often mediated and shaped by the platform logics where it is produced and performed, which can be in conflict with the creative's multiple and overlapping intentions for doing this work initially [11, 12, 53].

Today, platform metrics are both visible and legible to the average social media user, serving as a constant source of anxiety that creatives must contend with as they do their work [26]. As acts of vernacular creativity have come to dominate acts of cultural production in online spaces, media studies scholars argue that platform metrics—the likes, views, and shares that go along with a cultural artifact—have increasingly become the mode by which both creative success and failure is measured [53]. The value of creative work - *labor* - is shaped by such metrics and the platform infrastructures through which these metrics are created, understood, and acted upon. The term creative labor refers to the work involved to professionalize [19], monetize [19, 47], make visible [1, 8, 47], and relate to one's audience as a cultural producer [7, 10]. Creative labor is shaped by and through the platforms where it takes place but also speaks to the broader process of professionalizing creatives and the ways they monetize their work. Creative laborers online are forced to consider their creative success through the lens both of platform metrics and the additional work they do to relate to their audiences and ensure their creative works are seen [26].

To understand creative labor, one must first understand the embedded relational labor in doing creative work. While historically relationships between audiences and established creatives such as musicians were controlled by formal management structures within the entertainment industry [19]; creatives who share their work in online spaces must establish, foster, and maintain intimate long-term relationships with their audiences through a practice known as *relational labor* [7, 10, 19]. Relational labor is the work that creatives do when they communicate with their fans with the ultimate goal of securing financial support [19]. Relational labor is unique to creatives who create and share their work digitally, because online, people are simply more connected – and this connection heightens expectations of online creatives beyond those of traditional cultural producers[7, 10]. The practice is challenging for people who are

introverted [22], or people who want to create boundaries between themselves and their audiences [10, 33]. Relational labor is a part of creative labor, however, the work of maintaining these relationships is also challenged by the constantly-shifting platform environment where it is performed [25, 53].

With platform environments constantly shifting, a second labor challenge emerges for creatives - *visibility labor*—"the work enacted to flexibly demonstrate gradients of self-conspicuousness in digital or physical spaces depending on intention or circumstance for favourable ends" [1]. Visibility labor is the work that goes into ensuring that creative work is seen online. This work can be collective, such as beauty vloggers sharing information amongst themselves about how YouTube's content recommendation algorithm works in order to ensure video content performs well and therefore are financially lucrative [8]. This work can also involve platform knowledge and include a reflection on platform values, such as considering how advertiser-friendly creative content shared on YouTube might be [47]. YouTube's algorithm and advertisement strategy has been shown to demonetize content that queer and transgender video makers create and share about being queer or transgender [53], and creatives must perform additional labor in relation to the platform, rather than their creative work, in order to ensure that their video content reaches this audience. This precarity means that creatives are more incentivized to learn and understand the underlying infrastructural logics of platform infrastructures – such as content recommendation algorithms on Etsy [42], Instagram [18, 50] and YouTube [8, 19, 47] – because they need to make their creative work visible to ensure it earns money. Duffy and colleagues [26] note how creatives shift and adapt their creative routines with an eye toward visibility labor; finding that unpredictability in markets, in other creatives, and in platforms themselves, all impacted creatives and their ability to have their creative work seen.

The constantly-shifting platform environment suggests that creatives are not consistently able to draw on platform infrastructures to enact their creative routines or find value in their work shaped by and through their own intentions. Missing from many of these conversations are the relationships that people have with their creative work. Creative labor, and by extension relational and visibility labor, studies focus on those whose livelihood is tied to the creative work they do in online spaces – people using platforms with already large audiences, or those who aspire to have large audiences [7, 8, 10, 26, 47]. Other studies take a more intimate approach, focusing on the creative work that individuals do through explorations of identity [4, 21, 29], or collective sense-making during times of shared trauma, like war [3]. These approaches focus on aspects of creative work other than creative labor as a form of professionalization and monetization, while creative work underpins the research findings. Both of these approaches capture and seek to understand creative labor, however, we believe that there is a third population of creatives using these online spaces: creatives whose primary intentions for sharing their creative work are not tied to professionalization or monetization, but whose creative labor still exists within the same scaffold of platform governance and metrics. They have smaller audiences and different goals for their creative work. Put another way, so-called content creation is not these creatives' day job, but they still must contend with platform logics like it is. Further, even when examining changes in people's creative routines and creative products, Duffy and colleagues' [26] analysis is focused largely on conversations around professional elements, such as markets, platforms, and underlying platform infrastructural logics as they relate to visibility. The *creative* part of creative labor, the intentions creatives have to create, and to continue to create, in the face of the other challenges of creative labor, remains under-explored.

2.3.1 Creative Work on TikTok. An emergent platform to investigate creative labor is TikTok. Recent work has focused on how TikTok's content recommendation algorithm, the For You Page (FYP), and its distinct visual form present new insights into attention economies and new challenges for creatives as they work to ensure their creative works are visible [2]. HCI research focuses on how TikTok, as a platform infrastructure, has developed a normative culture of authenticity and "fun," encouraging creating and sharing videos expressing positive emotions and aspects of oneself, while discouraging sharing difficult emotions [6]. Other work examines how LGBTQ+ identities are constructed by the FYP, presenting contradictory identity spaces where individuals feel both seen as they are LGBTQ+ people in videos and unseen as the LGBTQ+ people they see present a normative version of queerness that does not apply to them [59]. Scholarship building on [59] finds TikTok presents a normative version of identity across intersectional identities [41]. Other work engages in design futuring with people with disabilities through play [28], looks at virality as it relates to youth social activism [43], and, while not specifically focused on TikTok, the harassment that creatives experience on social media [65]. Central to all of this research is the creative labor of people who make and share videos on TikTok that look at the microcelebrity influencer [2] or take approaches that prioritize other aspects of user experience on TikTok with creative work as the underpinning [28, 65]. In this study, we are interested in understanding the creative intentions of smaller-scale creatives on TikTok and their relationships to creative labor, how they go about their everyday routines on TikTok, and how TikTok's platform logics influence their intentions to create, as well as their creative routines. Next, we describe our method.

3 METHOD

In this section we discuss our method. We describe our recruitment for semi-structured interviews, followed by our analysis method, where we used an inductive, open-coding approach based in grounded theory. Finally, we discuss the limitations of this study and reflect on our positionality.

3.1 Participants and Recruitment

For this study, we wanted to speak to people who (1) were over 18 years old; and (2) make videos for TikTok. Following [59], we chose to make a minute-long video with a pitch to share publicly on the first author's TikTok account, subsequently sharing this video to our personal social networks on Twitter and Tumblr. Finally, we shared a text-based version of the recruitment pitch in a private discord server the first author was invited to join by the moderation team following a discussion of prior research into TikTok and TikTok's algorithm. The recruitment call shared on Discord was posted with moderator permission. With these recruitment

Recruitment Site	Participant(s)
Personal Social Networks	P1
TikTok	P2, P5, P7, P9, P11, P12, P14, P15
Twitter	P4
Tumblr	P8
Discord	P3, P6, P10, P13

Table 1: List of Participant Recruitment Sites

sites, we hoped to capture many diverse experiences of people who made and shared videos on TikTok. By recruiting from multiple and diverse pools, we hoped to recruit participants who had a range of creative intentions, from smaller-scale, hobbyist production to the professionalization of their content. Table 1 is a summary of these sites and the participants who came from each. These particular sites were discussed by the first and second author and were triangulated sites to avoid sampling bias Simpson and Semaan [59] note that may come from recruiting relying strictly on TikTok's content recommendation algorithm. Triangulating recruitment sites is an approach commonly taken in HCI studies [3, 56, 59].

The recruitment video we shared was closed-captioned for accessibility [58]. It introduced the project's general goals, relayed some basic information about the research team, and invited interested parties to complete a recruitment survey linked in the comments. The survey was hosted on our university's Qualtrics site. Interested participants could complete the survey and provide basic demographic information about themselves (see 2 for a breakdown of these demographics). Following [38], each of these demographic responses was a free-response box, allowing participants to self-identify. Individual respondents were contacted via email. Out of 28 individuals contacted, we received 16 affirmative responses and conducted 15 interviews. Table 2 is a breakdown of information about our participants, as they described themselves.

P#	Age	Gender	Pronouns	Race
1	27	Woman	she/her	Latina
2	31	Woman	she/her	AfroLatina
3	30	Woman	she/her	Latinx & Indigenous Bolivian (Aymara)
4	36	Woman	she/her	White
5	21	Male	he/him	White Jewish
6	29	Nonbinary	they/them	White
7	39	Male	he/him	White
8	24	Nonbinary	she/they	White
9	18	Male	he/him	White
10	40	Nonbinary	she/they	White
11	20	Woman	she/her	White
12	31	Female	she/her	Chicana & Indígena
13	31	Nongender	Most	White
14	31	Woman	she/her	South Asian (Tamil)
15	26	Nonbinary	She/they	South Asian

Table 2: Participant Demographics

3.2 Interviews

The first author conducted 15 semi-structured interviews between February and March of 2021 on Zoom, which lasted between 50 minutes and 2.5 hours (mean = 100 minutes). After the first hour, we paused the interview asking if the participant wanted to continue, and, with the exception of two participants, all continued past the first hour. Participants were compensated at a rate of USD $20.00 for the first hour and a subsequent rate of $20.00 an hour following the first hour of the interview. While our participants were provided remuneration for their participation, they were free to end the interview at any time. Before starting the interview, we asked if participants were in a safe place to discuss potentially sensitive topics. Once confirmed, we obtained the participant's oral consent to participate in the study, as well as their consent to record the interview and transcribe it for analysis.

The interviews in this study were designed as life histories [71], with opening questions focused on establishing rapport while gaining a better understanding of the creative work participants have done in online spaces throughout their lives. During this time, the first author shared their experiences of being a creative online, following [24]'s recommendations around reciprocity for cultivating rapport and connection during distance interviews. By taking a life histories approach, we build on the assumption that prior experiences people have had across their lives inform their current actions [71]. These life histories provided rich insights into how participants viewed both their relationship to creativity and to their creative work. We asked participants about their early experiences with online community spaces, and where they had previously engaged in creative projects online.

Discussing early technology-mediated experiences with creativity allowed the first author to tailor follow-up questions based on participant experiences as creatives on TikTok. We subsequently asked participants to describe their general experiences with the platform, asking questions about what led participants to start making videos, and how they found the community on TikTok. We also asked them to describe how they thought the For You Page algorithm disseminated their videos and recommend videos to them. Next, we discussed creating videos on TikTok – touching on TikTok's interface as it related to participants' routines around their creative work. Additionally, we discussed experiences of activism on TikTok, and what kept our participants using TikTok.

3.3 Inductive Coding Cycles and Analysis

Following transcription, the first author conducted inductive open coding and memoing of the 15 interviews using MAXQDA, a qualitative analysis program. This observational soak [60] used an approach based on grounded theory to analyze the interview data [17]. This approach is common in HCI research [56, 59]. The authors met weekly to discuss emergent themes and observations throughout the analysis and writing process. The first author subsequently conducted a second round of coding, collapsing the open codes

into categories based on similar themes and points of discussion. Participants shared their routine practices around doing creative work on TikTok that focused on three themes: (1) preparation, (2) production, and (3) presentation. They discussed the challenges and obstacles they felt TikTok as a platform introduced to disrupt the intentions behind their creative work. These challenges clustered around the three major purposes that our participants reported using TikTok and what became the themes we present in our results: (1) to professionalize, (2) to socialize, and (3) as a creative outlet. Across these categories, our participants reported feeling stifled creatively, struggled with TikTok's classification of their creative work, and felt burnt out due to demands to produce high-quality creative work using TikTok.

3.4 Reflections & Limitations

There are several limitations to this work. As with all conversations with a small group of diverse individuals, there are generalizability concerns about our participants' experiences as they relate to all TikTok creators. To mitigate this in our data, we recruited across multiple platforms (e.g. TikTok, Twitter, Tumblr, Discord), hoping to capture broader experiences. We take care to address topics in our analysis around identity without using universalizing terms, as our research participants, while diverse, does not feature enough of any one group of LGBTQ+ or neurodiverse people or any particular race or ethnicity to speak generally to the issues potentially discussed by participants. Work on LGBTQ+ TikTok users such as [59] or [54] focuses specifically on the experiences of LGBTQ+ people on TikTok and Catherine Knight Steele recently [63] focused on Black women's experiences and creative work on TikTok while taking a Black feminist lens. Secondly, this research focuses largely on smaller-scale creatives on TikTok (usually averaging around 10,000 followers), and thus our findings lack depth and understanding describing the experiences of TikTok creatives with larger audiences. While the first author has done creative work online in the past in transformative fandom and creative writing spaces and has scripted podcasts and videos for YouTube, the first author does not *create* on TikTok. The second author, while active in many online communities and actively consumes what is produced by creatives on platforms like YouTube, is not a regular TikTok user and does not actively do creative work on TikTok. This grounding is important as, while adjacent to many of the discourses around online creative work, neither author is directly involved in discourses of creative work on TikTok specifically. The first author is white and queer. The second author is middle eastern and straight. While these details may not be relevant to the subject of this research, when interviewing BIPOC people as a white person, certain unconscious biases may emerge, and therefore we note this detail.

4 FINDINGS: INFRASTRUCTURAL CHALLENGES TO CREATIVE INTENTIONS

On TikTok, our participants had creative routines around three major themes: preparation, production, and presentation, which drew on prior experiences being creatives on other online platforms. Table 3 illustrates these routines and the various tasks embedded within them. Our results, however, focus on the emergent infrastructural challenges participants experienced enacting the imagined ideals and creative intentions of their routines as shaped by their life histories with creative labor on online platforms. Of the myriad stated intentions behind our participants' creating work on TikTok, three primary categories of creative intentions and infrastructural challenges emerged: (1) professionalization, (2) social interactions, and (3) access to creativity. We find small-scale creatives on TikTok have complex and often overlapping intentions behind why they create on the platform, rather than concerns of monetization or professionalization [19, 53]. With each theme, we report on how participants described their creative intentions and the infrastructural challenges that disrupted those creative intentions. We highlight how participants' routine behavior as they did creative work was disrupted and challenged by TikTok's infrastructure.

Creative Routine	Tasks Involved
Planning and Preparing *(P1, P2, P5, P7 - P10, P12 - P15)*	- Researching Topics - Preparing Materials
Writing and Rehearsing Scripts *(P3, P7, P10, P13, P15)*	- Writing Materials - Practice Time
Considering Production Elements *(P1 - P15)*	- Creative Engagement with Production Space - Designing Props & Costumes - Developing Presentation Materials - Filming Video
Editing Video(s) *(P1 - P15)*	- Editing Internally to TikTok - Editing Externally to TikTok - Platform Research to Find Trending Elements - Adding Closed-Captioning - Linking Video Series Together - Writing Video Captions
Keeping Form & Subject Matter Consistent *(P1 - P5, P7, P10, P12, P14)*	- Making Videos Only about a Specific Topic - Making Videos Only around a Specific Form - Restricting Creative Engagement - Maintaining Multiple Accounts
Keeping Self-Presentation Style Consistent *(P3, P5, P7, P13, P15)*	– Maintaining a Communication Style & Persona

Table 3: Creative Routines and the Tasks Involved

4.1 TikTok as a Space for Professionalization

Here, we discuss the role of professionalization for our participants in their creative work. Professionalization emerged with "success" for our participants—videos garnering far more engagement than they were accustomed to as small-scale creatives. Moments of virality like this changed how participants viewed and engaged in their creative work. We discuss how these moments of professionalization shaped the creative intentions of our participants. We then highlight how TikTok's infrastructure introduced additional labor to the creative work participants did, limiting the creative work

they shared on TikTok and disrupting our participants' intentions behind their creative work.

4.1.1 The Creative Intentions behind Professionalization on TikTok. Nearly all of our participants shared stories of how they had had videos go viral on TikTok, resulting in an influx of new followers and an increased demand for more videos. For small-scale creatives like our participants, a new, larger, audience changed how they interacted with TikTok in both their creative work (e.g. by sticking to more specific topics or visual forms) and their audiences (e.g. by actually starting to create for them, rather than for themselves). Increased viewership lead some participants, such as P9, to try and recreate the previous success of their viral hit. For others, viral moments led to shifts in the creative work they did on TikTok toward a more intentional—polished and professional—presentation oriented toward this new audience.

For example, both P1 and P5 joined TikTok to promote a creative project: P1 sells jewelry and P5 promotes a book he wrote. The videos they produced, both explained, reflected their intentions to sell their creative project through the production of engaging videos that would catch the viewer's eye. P5's book project required him to establish expertise in the field he was writing about, leading him to make educational and promotional videos aimed at driving up book sales. He shared how his creative work shifted from educational videos to funny things about economics and video games.

> "The most creatively demanding thing I've ever done was a video I posted a few days ago [...] saying that Mario Kart is the ideal economic model. Because the people at the top get worse items and [than] people at the bottom."

Although initially using TikTok to make videos to promote his book, P5's enjoyment in making more *fun* videos reflect how TikTok markets itself as a "fun" platform [6] and a place for play [28]. P5's intentions around creating on TikTok, while still oriented in a professional direction, over time came to align with who he felt he was as a person - a guy who loves math and nerdy things. On January 6, however, P5 watched the Capitol Riots in Washington, D.C. unfold on TikTok, radically shifting the intentions behind the creative work he did on TikTok:

> "And then January 6, happened. I was like, I understand this intricately. As someone who has studied white nationalism–as someone who has studied insurrections and fascism. Part of what I want to do is educate people to keep themselves safe. And every now and then I post book updates, every now and then I post [anonymized] content. But now it's mostly news. It's mostly talking about data transparency; it's mostly talking about keeping people safe from threats they didn't even know existed."

P5's intended use of TikTok was a professional endeavor to promote his book, but his videos have now changed to discuss current political issues in an educational, fact-based frame. With this shift, P5's intentions for his creative engagement professionalized from self-promotion to a more outward-oriented mode of communication focused on helping people feel safe, demonstrating how TikTok affords creatives with avenues to shift their creative work over time as they develop a more professional identity on TikTok.

4.1.2 Infrastructural Problems with Professionalization: Am I a One Trick Pony? While participants often spoke of their intentions to professionalize their creative work, they also described feeling burnt out by TikTok's constant demands to produce more, and more, and more videos. The value of participants' work shifted from producing creative work aligned with their intentions to producing more professionalized creative products. TikTok expected them to do creative work like they were influencers with massive followings, rather than the small creatives they were. Some shared feelings about how their creative work was not valued by their audience. Others struggled with the feeling of being pigeonholed into a particular niche based on how TikTok's algorithm understood, and thus valued, their creative work. They felt this nichification stifled their creativity and didn't allow them to use TikTok as a creative outlet as they intended. The work involved in maintaining consistent creative routines around the routine presentation of creative work on TikTok led to participants, especially as small-scale creators, feeling as though their creativity was stifled - that TikTok was no longer "fun."

Repeatedly, participants discussed feeling constant pressure to produce more videos, particularly after they had a video do well. Several participants (P2, P4 - P9, P12, P13, P15) described having videos go viral on TikTok and garner many more views, likes, and comments than they had intended for the video. After this success, participants gained an influx of new followers and felt pressured to recreate the success of that first video. P6 tells the story of a friend and fellow small-scale creator who had a joke video go viral, explaining the pressure their friend felt to recreate the success:

> "So she's meant to keep doing the same joke over and over again. But audiences will get tired and we'll try and find something else."

P6's story throws the tension between the creative who wants to recreate creative success and a fickle, bored audience into stark relief. It illustrates how TikTok's infrastructure can introduce elements of professionalization—in this case creative success over a funny joke and visual shared in a video—simply by the nature of having the video get seen by more people than the creator's initial intentions for the video. P6 continues:

> "[username] is a good one for it because she had the [anonymized] joke, that she's just a [punch line of anonymized joke]. And she kept doing that. [...] And then she moved to [related anonymized joke]. But that's her reinventing it – reinventing the thing and like staying relevant and staying consistent."

P6's friend was creatively stifled by the success of her joke video, and could only try and make the same joke, or reinvent the joke to stay relevant. Through the increase in their audience size, TikTok's infrastructures disrupted P6's friend's creative routines by introducing a new metric of creative "success"—likes, views, shares, and comments[53]—that simply were not present on her other videos. For small-scale creatives, TikTok's infrastructures disrupt creative routines by introducing pressure to professionalize—and reproduce that first success. When new-found audiences are not rewarded

with consistent creative work, they are less prone to engage, and therefore reproduce the metrics of creative success. This is also baked into the mythos of TikTok, where "just being yourself" garners more "success" than being somehow inauthentic [6]. While the creative is always free to not attempt to reproduce the success of a viral and remain true to their creative intentions, the way "success" is understood on the platform makes that choice very unappealing, and potentially can force the creator to make compromises around what they create and share by disrupting their creative routines so that they align with platform values.

Along with the challenges presented in creating and sustaining a routine around their creative work that allowed our participants to present a consistent persona and video form, participants also talked about how maintaining this consistency meant that they had to lose their creative edge and spontaneity. Participants attributed this to how TikTok understood the videos they made and shared, and how that knowledge and categorization impacted their creative routines. P7, a puppeteer, discussed how he also enjoys duetting other people's videos to sing along with them, and how, when he makes these videos, he doesn't use his puppets:

> "This is more selfishly, because [the video] doesn't perform well. But it makes me happy. You know what I mean? Like, when someone's singing and I love it. And I just want to duet with them. So I do, because I love to sing, and I love getting to sing with other people. And so boom, now I'm singing with someone who's really talented, who plays the bass and I'm gonna sing along with that stuff, [and,] like I said, doesn't perform well. It's certainly more for me than it is for my audience."

While P7 enjoys making these videos, he also wrestles with the fact that these videos are very different from the majority of his creative work on TikTok and therefore are not what his audience wants to see. His puppets drive his creative success, according to TikTok's infrastructural logics, which is further exacerbated by how TikTok has created a datafied representation of P7's creative work. Videos of P7 singing, with his face, rather than his puppets, on camera, are not usually what P7 makes. These videos do not do as well for this reason, and TikTok's infrastructures serve as reinforcement of P7's creative work - professionalizing him into a puppeteer, disrupting P7's creative routines as someone with the creative spontaneity to create singing videos on the fly.

P2 and P9, both of whom do creative things with mathematics on TikTok, shared P7's frustrations. P2 explained that to have her videos be interesting on TikTok, she had to do physics, applying the math she wanted to do to a relatable problem for the video to be successful. Feeling stuck in what they could make because of how TikTok understood the majority of the videos they made had a detrimental impact on our participants' creative routines. Sometimes participants felt so stuck that they felt they could not deviate from their established norm of creativity. As P7 lamented, "I met with somebody yesterday about what is it to let go of some of that and still have those times and enjoy things for myself."

The pressure to produce and to be consistent our participants described led to feelings of alienation from their creativity that are often associated with feeling burnt out. P15, a young actress who took up TikTok as a creative outlet during the COVID-19 pandemic, described the feelings of burnout succinctly. P15 creates multi-part skits in full cosplay, which requires a great deal of creative effort:

> "I do what I can with the energy that I have at the time [...] which is probably why it's hard for me to like keep up with series and things like that. Because then I know the amount of energy and effort I need for that thing. [Video Description.] And people are already saying part three, even though I just posted it, like 16 hours ago. And I'm like, oh, man, I have to make another one. And they take so much emotional energy. And I have like a twist on all of them. So I have to be clever about my execution. [Video Description.] So it just takes so much time and energy to do those things that it's like hard to like, find the time and energy to want to keep doing it."

P15 is passionate and serious about her creative work as a professional actor. However, the way people consumed P15's creative work was challenging for her, and she found it hard to sink so much time into creative work consumed by her audience in a matter of minutes. TikTok's infrastructure doesn't allow for P15 to control how people view her creative work, and P15's professionalization led to her feeling burnt out and pushed away from her creative work. Feeling burnt out was not unique to P15. Most of our participants (P2-P7, P9, P10, P12-P15), discussed feelings of creative burnout and alienation from the videos they made. P13 put it succinctly: "TikTok isn't fun anymore." How TikTok metrifies creative "success" and values creative work is disruptive to our participants, and the emotional and mental toll of the work of creativity—both toward oneself and one's audience—is clear.

4.2 TikTok as a Social Space

In this section, we explore how our participants engaged in creative work with the intent to be social and connect with others. First, we describe how our participants discussed socialization as the intent of their creative work. TikTok's technical infrastructures, as we mentioned in the previous section, connect creative success with audience-based metrics, making participants feel that some of their creative work mattered more than others. We highlight how interaction with the human infrastructures which mediate and create metrics of creative success disrupted our participants' creative processes and intentions.

4.2.1 The Creative Intentions of using TikTok as a Social Space. Our participants described TikTok as a social space for them in addition to it being a professional space. The process of professionalization is inherently social, but as our participants were creating on a much smaller scale, they described how their creative work was intended to help them find community. Previous work shows how LGBTQ+ communities find community on TikTok [59], and we echo this finding in TikTok creatives. Most participants described intentionally doing creative work to find, foster, and maintain friendships and community–as small-scale creatives they did not want to grow audiences, but rather to make social connections with others. P2 and P7 made professional connections with others in their field and became friends with others; P8 and P10 were able to do cosplay skits with international collaborators; and P6 was able to form strong

friendships around their videos about coping with grief following their bother's death.

With some - if not all - of their creative work on TikTok focused on social interaction, our participants characterized the intention behind their creative work on TikTok, and where they found value in their work, as being for social reasons. As small-scale creatives, they were not performing for an audience, but rather contributing to and participating in a found community. Participants described doing duets, stitches, and using the audio of other people's videos to express themselves creatively and to engage in ongoing conversations. This process was not always easy–as TikTok's infrastructures introduced problems to this creative practice.

4.2.2 Infrastructural Problems with The Audience: Thanks, I Hate it Here. TikTok's human infrastructures around social interaction presented challenges for the participants in how they were navigating their audiences on the platform. TikTok's technical infrastructures equate creative success with audience-based metrics such as likes, views, or comments, which made participants feel as though their creative work was not valued equally. As small-scale creatives, TikTok's technical infrastructure connecting their creative work to audiences based on the engagement the video garnered had detrimental effects. Rather than connecting the video to friends and other social connections our participants' intended to have as the audience of their creative work, their creative work could get in front of wider audiences, causing uncertainty. TikTok had a different way of understanding the value of social relationships than our participants, which came into conflict with their creative intentions. TikTok's human and technical infrastructures imposed a metrified representation of creative success to our participants, leading them to do creative work for a similar, if largely unknown, audience in addition to feeling burnt out from infrastructural pressures to professionalize. This unknown or imagined audience [37, 45] is based on "people" as constructed by their trace data [15], which can serve to reconstruct societal prejudices and exclusionary practices [59].

Participants expressed how problems with their audience disrupted their creative routines. Harassment was the most common issue discussed, with P2 - P6, P8, P10, and P11 - P15 all reporting and describing specific experiences they'd had with harassment on TikTok. For example, P13 once made a video about types of accessibility in academic discourse that garnered such extreme vitriol and harassment from their audience that they didn't finish the video series and resolved never to make a video like that again. For others, though, the harassment was not focused on their video content, but rather on them as creatives. P5, who is Jewish, explains:

> "I've seen anti-Semitic content since I started, like, both explicit and implicit. And for someone like me, who speaks out a lot against white supremacy, neonazism, I was like, Oh, alright. Sweet. That's not good at all. I reported it, then did some research into it."
> *Interviewer: What did you find?*
> "That it's a small but growing problem on the app. [...] I think they made a connection of like, oh, this kid is Jewish. This other video talks about Jewish people."

P5's assessment of how TikTok's algorithm connected him to an audience was based on how the algorithm understood both to his identity - the creative work he was doing was activism based being Jewish - but also how the category of "Jewish" on TikTok seems to encompass creative work both by and for Jewish people as well as anti-Semitic content. This presented a problem for P5, which, along with being sexually objectified by his audience, made him feel uncomfortable, and not want to do creative work. P5 was able to join the Creator Fund fund as his audience grew, but even that was not enough of an incentive for him to want to deal with the harassment. Reporting that he'd made $187 USD in the Creator Fund, P5 added, "The stuff I get called, is either they're extremely anti-Semitic, extremely, like vile and crude."

While TikTok's technical infrastructure nudges small-scale creatives toward professionalization, the potential monetization of their creative work wasn't worth the social interactions with TikTok's human infrastructure our participants had to deal with. Privacy controls and comment keyword filters exist on TikTok, but these privacy settings are not made readily visible to creatives. User privacy settings are often misaligned with what they expect them to be, and sometimes social media platform users are unaware of their privacy options and how they work [46]. For our participants, harassment and objectification based on their identities were part and parcel with the disconnect they felt from their audiences around their creative work and routines. Even membership to the creator fund was not worth enduring the abuse.

Our participants described how they felt disconnected from their audiences, as the harassment and objectification they endured did not align with the intentions they had for this work. P5 wanted to make people feel safe with his discussion of news content, but, instead, because of how TikTok algorithmically constructed his audience–and the human infrastructures that supported it–he was the one who ended up feeling unsafe, harassed, and less motivated to do creative work. The emotional toll of pushing back interrupted our participant's creative routines, making it so they were less inclined to create in general. P5's experiences show the layered ways TikTok's infrastructures push on both a human and technical front toward professionalism through metrified success can introduce social problems in how people's audiences are constructed.

Twelve of our 15 participants spoke about being harassed based on the content of the videos they shared on TikTok. Most of the participants who were harassed based on their videos and creative expression are multiply marginalized. Five are trans or non-binary, four are people of color, and eight are queer. P12, a Chicana and Indígena woman from the Southern United States, makes videos discussing the cultural origins of machismo and other forms of toxic masculinity, extending her career as a social media manager and food blogger on Instagram to being a smaller-scale TikTok creative doing creative work unpacking Latinx and BIPOC issues in the US. She explains that the content of her videos, an exploration of her heritage, has led to her being harassed:

> "There's the death threats. There's the rape threats. There's the I'm gonna cut off your head. Like it's come to the point where I'm like, okay, step up."

As P12 is speaking to a specific cultural issue relevant to her community, her videos are connected to audiences by the FYP algorithm – an infrastructural logic – who may not wish to hear what P12 has to say, but who may be considered an ideal audience for P12 based on their trace data use patters to TikTok's algorithm. This

recommendation of her video to these potential audience members how may be "interested" placed P12 at risk and led to her being harassed to the point of wanting to fight back, as P12's 'step up' comment illustrates. The infrastructural elements of TikTok that put our participants at risk for harm present challenges to audience management, all while disrupting people's creative routines.

TikTok's technical infrastructures around visibility presented additional challenges to our participant's creative routines in how it pushed participants into situations where they were interacting with audiences they never intended for their creative work. This led to feelings of creative burnout, as the emotional toll, even when incentivized like P5's use of the Creator Fund. P15, at one point mentioned, "We're just somebody on the screen." The tiredness crept into her voice then, as she spoke about her lack of creative motivation in the face of the constant demand for more, more, more all while maintaining a consistent face for the audience. Other participants echoed this same exhaustion with their audiences, discussing how they felt seen in ways they did not want to be seen. How their creative work was connected to audiences did not align with the creative intentions embedded into their creative work. Participants described being pushed away from their creative work (P1, P2, P5 - P10, P12 - P15), audiences (P5, P7, P8, P10, P12, P13, P15) and themselves as creatives (P7 - P10, P13, P15); all of which disrupted our participant's creative routines and them altering their creative practices on TikTok. Some stopped making videos after negative encounters with unintended audiences. Others decided to avoid making videos on certain subjects based on negative interactions with members of their intended audience. Their interactions with their audiences afforded by TikTok's infrastructural logics, led to our participants feeling burnt out and pushed away from their creative work based on the audiences TikTok constructed for their creative work.

4.3 TikTok Affords Access To Creativity

Finally, we explore small-scale creator's intentions to use TikTok purely as a creative space and outlet. First, we describe how people discussed how TikTok afforded them access to creativity, as well as how it allowed for new forms of creative expression for our participants. We then highlight how TikTok served to disrupt and shift these creative intentions.

4.3.1 Using TikTok as a Space to be Creative. Participants highlighted how TikTok is a creative and dynamic space that allowed them to stretch their creative wings – sometimes in ways they never had before. P7 started to use puppets in his videos to communicate messages of empathy for his small audience, P1 had never specifically filmed herself doing her hobbyist jewelry-making work before signing up for TikTok, and initially saw this work as simply a marketing tool to drive people toward her business. Others described how TikTok allowed access to creativity and creative expression that they'd once considered lost. P10, who stopped doing creative work as a teenager following a parent discovering the creative writing they were sharing online and using the content of that work to get P10 institutionalized for mental health issues, described how TikTok has allowed them to reengage with their creativity after this traumatic event:

> "[TikTok is] pushing me to be a creator, again, in real life. I'm spending more time scripting and writing narratives and constructing storylines and that's something that I was very passionate about and got kind of maligned out of. So it's been a very therapeutic space for that reason. [. . .] I would say, I think it's given me an opportunity to regain it."

P10's description of scripting – constructing storylines and writing narratives for their creative work - demonstrates how TikTok's infrastructures allowed them to be intentional in their creative engagement in non-intuitive ways based on a surface view of TikTok's design. Rather than simply recording themselves, P10 describes spending time writing and considering how to construct the narrative arcs of their videos in new and creative ways, developing creative routines. P7, as well, spent time scripting his videos using the notes application on his phone - using these scripts to allow him to improve upon his initial ideas to present the most polished creative product possible. For our participants, TikTok allowed their intention to present their creative work (e.g. P1's jewelry-making videos, P8's videos of themselves doing fine art) in ways they had not previously been able to do on other platforms - or, in the case of participants who shared art on multiple platforms (P1 - P4, P7-P9, P11 - P15) - allowed them to present their art in a new medium. While TikTok offered new and transformative opportunities for their creative work, participants also spoke of how TikTok introduced challenges for their creative engagement with the platform.

4.3.2 Infrastructural Problems with Creativity: This App Won't Let Me Do What I Want. Our participants described the challenges TikTok presented to their creative processes primarily by framing TikTok as holding them back creatively. They cited problems with TikTok's interface, which has been shown to introduce challenges for neurodivergent people [58], as well as discussed how they felt some topics could not be discussed due to how they perceived TikTok's normative culture to be averse to negativity. All told, these challenges were creatively limiting for our participants, introducing more labor to the process of enacting their routines around their creative work in both the act of making (e.g. filming) and in what they could do creative work about (e.g. subject matter).

Participants described how the technical infrastructures of TikTok's in-app video editing suite presented challenges for them in doing what they wanted in their videos, creatively. They also noted ways they worked around these shortcomings. On top of the creative energies expended to script, film, and polish creative ideas into TikTok videos, participants described how TikTok's interface introduced additional labor to their video making, labor that they had to perform to ensure their creative intentions for their work were met. Additionally, participants discussed how they felt limited creatively in terms of what they could talk about, or how they could talk about it, based on how TikTok's recommendation and moderation algorithms understood their creative work. Participants described several different strategies they used to ensure that their creative work could reach its intended audience, but in the process of this, they also touched on how these strategies, too, introduced extra steps – *extra labor* – into their creative routines.

When participants shared stories of feeling limited creatively by TikTok's video editing and filming interfaces, they told us about

how TikTok's infrastructures presented challenges to their creative routines. For example, several participants described filming themselves with external cameras (P3, P4, P13) to ensure better video quality. P3, an Android phone user, explains why she is considering altering her normal creative routine, as well as the routine that TikTok's infrastructures nudged her toward:

> "[T]here's so much judgment that goes on within all creative communities when it comes to Android versus Apple. [...] But on an Android phone, when you take video on TikTok, unless you upload it in HD, it's screen recording what it is that it's seeing in your camera app, that's why it doesn't look good."

The depreciation in quality, as well as frustration over TikTok's in-app editing suite, made it so that P3 was considering altering her creative routine. She explains:

> "I haven't gotten to the point where like, I take videos and upload them to [Adobe] Premiere and edit them there. And I probably will."

While she has yet to fully change her routine, P3 felt limited creatively by what TikTok had to offer her as an Android phone user in terms of the quality of video she could produce, as well as what she could do with her filmed video within TikTok's editing suite. P3's drawing on professional experience with Adobe products demonstrates a proposed workaround to the ways she felt limited creatively by TikTok's infrastructure, but it also introduced more steps to her creative routine, leading P3 to not yet change her routine.

Others voiced frustrations with TikTok's editing suite. P12 described how editing her videos on TikTok made her want to throw her phone across the room, and P1 explained that she hated hearing looped audio while editing. While some participants (P4, P13) turned to external editing software, others believed that alternatives to editing videos directly in TikTok presented a barrier and further limitation for new and small-scale creatives due to their complex nature, steep learning curve, and high financial cost. P10 explains:

> "The UI is bullshit for anybody who's actually trying do [video] editing, you're basically saying, if you don't have your own editing software and you can't spend $500 on an Adobe product, then you're not going to be able to compete in this space. And we're never going to give you the views that you want."

P10's perspective situates the disruption to their creative routines that TikTok's editing suite presents as a barrier to both their creative success, as well as demonstrates how TikTok's infrastructures do not support new or smaller-scale creatives. To professionalize as a creative on TikTok, part of the creative labor involved involves learning external software (e.g. Adobe Premiere) or acquiring new hardware (e.g. a non-Android phone). This introduces extra financial and time costs for creatives and can limit what they can create without committing to absorbing these costs. We note here that creative success takes on a different meaning when you are not able to do what you want with a creative object, but rather have to settle or compromise with things that are within your skill level. The decision to alter one's creative routine to address perceived infrastructural gaps away from their focus on doing creative work, creating additional labor to fulfill their creative vision.

Participants also discussed how TikTok's content moderation algorithms caused them to feel limited creatively and to alter their creative routines based on their perceptions and experiences P11, for example, had a video she made taken down:

> "The video I was talking to you about earlier, which was the compilation video of my spring break, was actually taken down because I showcase clips of us drinking. And I appealed and said, you know, everyone that was in the video was consenting and of legal age, and then they put it back up. [...] That was kind of weird. I didn't know why they took it down in the first place. Because it wasn't like we were doing anything illegal. It was just, I guess, taboo."

Rather than being able to celebrate a fun time with her friends in the form of a video diary, P11 had to think carefully about what video content she could and could not include in the video, which limited what she could make, creatively. P11's experience was not unique, as many of our participants reported being very careful about what they shared on TikTok or how they shared it. P3 shared an observation she'd made about the self-censoring ways people altered their creative routines when speaking about issues that TikTok had removed content about in the past.

> "Why is it that there are so many cooking videos that have an audio that has to do with social activism? Right, it's because social activism is controversial and not positive, but cooking videos are positive and get high traffic."

As P3 observed, oftentimes our participants felt as though TikTok's content moderation algorithm forced them to be very careful about what they included in their videos. This added additional steps to their creative routines and forced them to think critically about how TikTok's algorithms may see their creative work. This limited to our participants, creatively, as they had to start to consider how TikTok itself would view their creative work, as well as if they could execute their ideas using TikTok as a medium. While TikTok's infrastructures presented problems for our participants on the professionalization and social fronts, the infrastructural challenges TikTok presented specifically to our participant's creative routines and outcomes represent how TikTok made it increasingly challenging for our participants to do what they wanted, creatively.

5 DISCUSSION

In discussing their creative routines, participants described three broad categories: (1) preparation, (2) production, and (3) presentation of their creative work. TikTok was a space that served multiple purposes for them. The complex and overlapping intentions they had behind their creative work on TikTok were (1) for professionalization, (2) for social reasons, or (3) as a creative outlet. Participants discussed challenges they encountered as they went about their everyday creative routines. The challenges were disruptions caused by the infrastructural logics of TikTok, which made it difficult for participants to enact their creative routines in a way that met the intent behind their creative work. In this section we discuss and extend these findings. We explore how platforms influence routine

creative work and examine how these influences can alienate people from their sense of creativity across multiple facets of creative work. We then suggest avenues for future work.

5.1 Platform Influences on Creative Work

The sociotechnical infrastructures—both human and technical—of TikTok introduced a sense of burnout for creatives on account of the challenges they presented and the structures they imposed. Addressing these challenges and navigating these structures was done in addition to their already complex creative work. Burnout, often linked with the discussion of imposter syndrome [16], and is "a syndrome of physical and emotional exhaustion" where a person can develop negative attitudes about themselves and their work [52]. If people cannot bring themselves to care about their work, they cannot place value in themselves as workers.

Historically, burnout was a problem within workplaces and organizations for management to address. Another way to consider burnout is through the lens of alienation. The economic conditions of capitalism lead to the objectification of labor and loss of self in ways that only benefit certain social classes while disregarding other classes, alienating them [48]. "Labor" is an activity that produces some sort of an object, performed by a human being, in a social and historical context specific to that activity, object, and human [48]. The burnout experienced by workers in contexts beyond what Marxist theory traditionally represents, such as social or creative workers, is also a form of alienation [40]. The same process of industrial alienation Marxist theory describes – whereby the worker objectifies the process of production, while also being objectified by the process of production – is seen in how people who turn their skills into objects of production become objects of that same production [40]. Through this widespread, public, series of interactions where a worker is both acting on and being acted upon, that alienated work emerges [40]. Workers, through the process of doing public-facing work, become alienated from it by becoming objects of that work, rather than individuals.

Alienation from the work is common in creatives as well. Creatives are far more likely to work multiple jobs, be self-employed, or do gig work [36]. Their labor is precarious [26], and is often focused on creating visibility for themselves and their creative products [1, 36]. When creatives who use social platforms to do creative work report feeling burnt out, it is because the working conditions of these platforms are shaped by the platforms upon which they produce and share their creative products. The labor these creatives perform is controlled by the platforms through their infrastructural logics, which accounts for why creatives report feeling as though they are losing ownership and identity–control over their creative intentions–over their creative products when they use them. They become alienated from what they intended their creative work to be. Recall P15's comment that on TikTok, creatives are "just somebody on a screen." On social media, creatives engage in acts of produsage, as they are co-constructing the platform and platform experience for both themselves and others [13]. Without the labor of creatives, online social platforms could not exist.

The relationship between TikTok and the creative, where the creative co-constructs both the platform and the platform for themselves and others, leads to the creative feeling alienated and burnt out creatively. TikTok's technical infrastructures, as well as the audience created by TikTok's human infrastructures which mediate success on TikTok, and the creative work itself, all push creatives away from their creative work and their goals for producing it. While previous work has looked at the relational labor between the artist and the audience [10, 19], as well as the visibility labors between the influencer and the platform [1, 26], the relationship between the artist with themselves and the art they create is less explored. Our findings show TikTok's infrastructure shifting this relationship between creative and creative intentions—*artist and their art*—by alienating the creative from their creative routine. We see this in three specific ways: alienation from the audience, alienation from the self, and alienation from the art or creative end-product.

5.1.1 Alienation from the audience. TikTok's infrastructural logics serve as a means to alienate the creative from their audiences and communities. The videos a creative shares on TikTok require time and effort to make and consuming them does not. The audience that TikTok's technical infrastructures create, which become the human infrastructure by which creative success is measured, does not value or see the work creatives do in the same way as the creative. It is not the result of sometimes hours of creative effort, but rather an easily-consumable nugget of entertainment. For small-scale creatives, whose creative work is only supported by TikTok's infrastructures only as long as it is uncontroversial and consistent in both topic and form, this can be particularly challenging. Through the process of objectifying their art, the creative produces a cultural artifact that, in turn, objectifies them into units of production through the sociotechnical mechanisms of TikTok's infrastructure. The time and effort - the *creative labor* - of the artist, is reduced to something that can be consumed piecemeal in an endless stream of alike, consumable, products. While the concept of relational labor focuses largely on the rapport between the creative and the audience [19], the concept does not focus on how platforms, or, indeed, audiences, can shape the creative product that is produced by the creative.

Our findings point to how TikTok's infrastructural logics - the FYP algorithm and the affordances by which audiences find, consume and engage with the creative's product - equally allow the audience to objectify the product of the creative's labor, while also alienating the creative from that labor. Recalling P15's story of how, less than a day after she'd scripted, prepared, filmed, and then produced the second part of her cosplay video series, viewers were already demanding the next part of the story. P15 had no way to limit who saw her video or prevent the audience from making such demands. Moreover, because of how TikTok's algorithm constructs P15's creative product and recommends it to viewers, P15, as a creative, became just another object of production to feed TikTok's endless demand for cultural production. This pushes the creative away from their creative work (and what they value about it), pushing them to focus on more labor-oriented tasks such as developing and maintaining a relationship with their audience through the practice of relational labor, sometimes across multiple platforms [10, 19]. This process of alienation from their creative work makes creatives feel burnt out and unwilling to take the ideas in their imagination and transform them into tangible creative products. As small-scale creatives, whose primary goals for their creative work are not to professionalize or monetize their work, TikTok's

infrastructures leave creatives with two options: buy into TikTok's success model to appease the audience, or lose your audience entirely. The audience and TikTok's infrastructure co-construct the alienation that creatives feel, which, in turn, takes the fun out of creating for the creative. The emotional drain of doing work that is only met with constant, infrastructurally-constructed demands for more, alienates creatives from their audience.

5.1.2 Alienation from the self. This process of objectification further extends to the relationship the creative has with themselves. While TikTok's infrastructural logics alienate the creative from their audience, the underlying influences of the platform pushes the creative away from their sense of self and sense of joy. In psychology, there are four distinct types of creativity, all of which relate to different types of brain activities in different situations [23]. The deliberate and cognitive form of creativity, which comes from the result of long-time work in a domain [23], is of particular note. While creatives on TikTok come from many different backgrounds, to continue to create on TikTok, creatives must hone their skills working within TikTok as a creative domain. Their investment of time and effort to produce cultural artifacts and engage in routine creative work is often cheapened by the infrastructural logics TikTok presents. The creative, to continue to be 'successful' on TikTok, has to pick one subject, one form, or one style of self-presentation. In making this choice, the creative alienates other aspects of their creative expression and invests additional time and labor into visibility. Platform features and algorithms are important to the labor online creatives do to ensure their creative work is visible [26]. Sometimes labor involves sharing knowledge with others [8] to help the success of everyone, but sometimes this also involves shifting what sort of creative work is completed and shared [26].

Recall P7, who spoke about how he didn't think he could sing on TikTok anymore. TikTok's infrastructural logics - the way its reccomender algorithms construct data representations of the creative's work - alienate the creator from their creative self by narrowing their creative expression into a single niche that is easily comprehensible to TikTok's infrastructures. The creative isn't able to engage wholly in what they want to create if they want to continue to have "success.". Creatives can see how the things they make are or are not "successful" based on the likes, views, comments, and shares that their videos receive. While a creative on TikTok is always able to continue making whatever they want, the pressures of "success" that are so embedded into TikTok's infrastructure push creatives into niches of easily classifiable creative content, and the human infrastructures of the audience and their constant demand for more of the same thing serve to alienate the creative from themselves as anything other than a one-trick pony. Thus, a creative like P7, who does puppeteering work, who likes to sing, and who occasionally comments on politics, feels as though they are under immense pressure to choose one aspect of themselves to present in their creative work to ensure that that content becomes visible and continues to sustain that success. This alienates other aspects of their creative selves, stifling their creative energy and ideas, and forces the artist toward presenting themselves as something easy to understand by TikTok's infrastructural logics.

5.1.3 Alienation from the art. When a creative feels pushed into a particular niche, they can also feel alienated from their creative work. They are stuck in a rut, creatively. In all the cognitive models of creativity Dietrich [23] discusses, there has to be agency on behalf of the creative in what is created, how it is created, and how it is then presented to the outside world. TikTok's infrastructural logics serve as a constraint to the creative's agency, causing creatives to disrupt their everyday creative routines in order to mold themselves and their routines into something that works on TikTok. For people who wish to professionalize their creative work, this model works well, but the trouble is that TikTok's infrastructural logics assume that any creative using the platform wishes to adopt this model of creative work. Buying into this model forces creatives to adapt their routines, alienating them from their creative work by taking the object of art and cheapening it. Much like how the word "content" alienates the creative in how flattens and cheapens creative expression in its sameness, TikTok's infrastructures alienate creatives from their creative work by forcing it to become constrained and digestible. Creativity comes from freedom, and TikTok's infrastructures - both social and technical - act as constraints of that freedom. By imposing these constraints, and the creative choosing to continue to create under these constraints, the creative is alienated from their art as they are no longer free to engage with it and do it as they so desire. The labor comes in the form of adapting their creative routines to create within these spaces and how these spaces see value in creative outputs.

5.2 Design Recommendations for Working With Creatives

Reflecting on the alienation that creatives feel on TikTok, and how platform logics can exacerbate and embody this alienation, we call attention to how TikTok and platforms like it could better work with small-scale creatives. There is no top-down, one-size-fits-all, approach to the creative work taking place and being shared on online platforms. We propose three design recommendations that better take into account the diversity of creative intention, including: (1) Uncoupling Platform Metrics and Creative Success, (2) More Malleable Structures, and (3) Limiting Objectification.

Uncoupling Platform Metrics and Creative Success. Platforms should work to uncouple the bond between platform metrics and creative success. This could be done by creating tiers of either desired audience size that creatives could opt into, or by allowing creatives to actively choose to opt in or out of algorithmic categorizations of particular work they share on platforms.

More Malleable Structures. Additionally, platforms could create a changeable structure around the goals creatives have for their particular work (i.e., influencer, casual user, growing audience, showcasing creative work). This structure could also allow creatives to view how their work is being recreated through TikTok's algorithms (e.g. associated keywords), help them better understand why particular audiences are viewing it, and potentially limit their audiences if they are doing creative work aimed at or around particular parts of their identity (e.g. making a pride post when they usually make cooking videos).

Limiting Objectification. Finally, limiting the demand for more creative work that is allowed to be posted to any individual's account would help slow the objectification of the artist by both the

platform and the audience. This would allow more time for creatives to work on their art, while also allowing for the audience to gain some awareness of the time and labor involved in creating the endless feed of creative work they consume so uncritically.

6 CONCLUSION: RETHINKING CREATIVE LABOR

Emerging from discussion and findings around the infrastructural logics of TikTok and their impact on creativity is a conversation around what is privileged in the definition of creative labor. Currently relational and visibility labors are foregrounded. While these are labor conditions that are directly influenced by the platform itself, our work builds upon this prior work by focusing on the ***creative*** side of creative labor. Our findings show the sociotechnical aspects of TikTok's infrastructure had a direct impact on the creative intentions and work that our participants did and shared on TikTok. This additional labor, the labor of actually ***being creative*** needs to be built into the definitions of creative labor in HCI. The creative has to labor to adapt their creative routines and products to ensure their work is visible [1, 26] and translatable [47] to meet platform logistical demands, as well as to relate to their audience [10, 19]. In accounting for these labors, the work of creating the creative product in the first place, and the impacts of platform logics on the creatives, their relationships with their creativity, and their creative products themselves are not considered, especially in conversations about small-scale creatives. To this end, we propose three additional considerations for thinking about creative labor:

- In addition to relational and visibility labors, creative labor needs to *focus on the work of creativity beyond monetization and professionalization efforts*.
- Creative labor has to *consider the platform in question and how it helps/hinders the creative process* or extends the routine tasks involved.
- Creative labor has to *focus on how questions of visibility are tied into the biases of platform infrastructures around the content and identity* of the creator in question (e.g. demonetization of LGBTQ+, BIPOC, etc. content).

HCI, among other fields, would benefit from focusing on how creativity and creative energies of creatives in online spaces have been reduced to a squishy and undefined label of "content" in research. Teasing apart the "content" at the heart of some HCI research on the future of work for gig workers, content moderators, and other precariously employed individuals, as well as the artifact-based examinations of social media platforms (e.g. creative content on a finsta as opposed to someone's Instagram account), would allow for a closer examination of the creative self at the heart of the production of the social and cultural experiences on these platforms. While not all online content is creative, the cultural artifacts created and shared by creatives are largely stripped of their meaning through the lack of definitional work embedded into a term like "content." By reducing creative labor to either the work involved in dealing with audiences or platforms, and the creative product to some nebulous "content", the work and energy involved in creating it are cheapened. By honoring the creative part of creative labor, HCI can better understand the amount of time, the level of effort, and the skill involved in the (often unpaid) labor that co-produces the experiences on social media that so many of us take for granted in our research. By better understanding creative labor, future work can involve a cross-platform examination of the creative skills and routines involved in the preparation, production, and presentation of creative work online.

This paper contributed an extended definition of creative labor, taking into account the alienation that creatives feel from their creativity and creative work based on the social and technical impacts of platform infrastructures. We examined the routinized behaviors of creatives on TikTok, and discussed their creative intentions and the challenges creatives faced when trying to enact them.

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REFERENCES

[1] Crystal Abidin. 2016. Visibility labour: Engaging with Influencers' fashion brands and# OOTD advertorial campaigns on Instagram. *Media International Australia* 161, 1 (2016), 86–100.
[2] Crystal Abidin. 2020. Mapping internet celebrity on TikTok: Exploring attention economies and visibility labours. *Cultural Science Journal* 12, 1 (2020), 77–103.
[3] Ban Al-Ani, Gloria Mark, and Bryan Semaan. 2010. Blogging in a Region of Conflict: Supporting Transition to Recovery. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Atlanta, Georgia, USA) *(CHI '10)*. Association for Computing Machinery, New York, NY, USA, 1069–1078. https://doi.org/10.1145/1753326.1753485
[4] Tawfiq Ammari, Sarita Schoenebeck, and Silvia Lindtner. 2017. The Crafting of DIY Fatherhood. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (Portland, Oregon, USA) *(CSCW '17)*. Association for Computing Machinery, New York, NY, USA, 1109–1122. https://doi.org/10.1145/2998181.2998270
[5] John Banks and Mark Deuze. 2009. Co-creative labour. *International journal of cultural studies* 12, 5 (2009), 419–431.
[6] Kristen Barta and Nazanin Andalibi. 2021. Constructing Authenticity on TikTok: Social Norms and Social Support on the "Fun" Platform. *Proc. ACM Hum.-Comput. Interact.* 5, CSCW2, Article 430 (oct 2021), 29 pages. https://doi.org/10.1145/3479574
[7] Nancy K Baym. 2018. Playing to the Crowd. In *Playing to the Crowd*. New York University Press.
[8] Sophie Bishop. 2019. Managing visibility on YouTube through algorithmic gossip. *New media & society* 21, 11-12 (2019), 2589–2606.
[9] Helen Blair. 2001. 'You're only as good as your last job': the labour process and labour market in the British film industry. *Work, employment and society* 15, 1 (2001), 149–169.
[10] Ross Bonifacio, Lee Hair, and Donghee Yvette Wohn. 2021. Beyond fans: The relational labor and communication practices of creators on Patreon. *New Media & Society* (2021), 14614448211027961.
[11] Pierre Bourdieu. 2018. Distinction: a social critique of the judgement of taste. In *Inequality Classic Readings in Race, Class, and Gender*. Routledge, 287–318.
[12] Pierre Félix Bourdieu and Lawrence D Kritzman. 1993. *The Field of Cultural Production: Essays on Art and Literature.* Columbia University Press.
[13] Axel Bruns. 2006. Towards produsage: Futures for user-led content production. In *Proceeding of the 5th international conference on cultural attitudes towards technology and communication*. School of Information Technology, 275–284.
[14] Jean Elizabeth Burgess. 2007. *Vernacular creativity and new media.* Ph.D. Dissertation. Queensland University of Technology.
[15] John Cheney-Lippold. 2017. *We Are Data.* New York University Press.
[16] Elizabeth F Churchill. 2018. Is there a fix for impostor syndrome? *Interactions* 25, 3 (2018), 22–24.
[17] Juliet Corbin and Anselm Strauss. 2014. *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Sage Publications.
[18] Kelley Cotter. 2019. Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society* 21, 4 (2019), 895–913.
[19] David Craig and Stuart Cunningham. 2019. *Social media entertainment: The new intersection of Hollywood and Silicon Valley.* NYU Press.

[20] Mihaly Csikszentmihalyi. 2014. Society, culture, and person: A systems view of creativity. In *The Systems Model of Creativity*. Springer, 47–61.

[21] Dipto Das and Bryan Semaan. 2022. Collaborative Identity Decolonization as Reclaiming Narrative Agency: Identity Work of Bengali Communities on Quora. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (New Orleans, LA, USA) *(CHI '22)*. Association for Computing Machinery, New York, NY, USA, Article 236, 23 pages. https://doi.org/10.1145/3491102.3517600

[22] Roei Davidson and Nathaniel Poor. 2015. The barriers facing artists' use of crowdfunding platforms: Personality, emotional labor, and going to the well one too many times. *New Media & Society* 17, 2 (2015), 289–307.

[23] Arne Dietrich. 2004. The cognitive neuroscience of creativity. *Psychonomic bulletin & review* 11, 6 (2004), 1011–1026.

[24] Laurie Drabble, Karen F Trocki, Brenda Salcedo, Patricia C Walker, and Rachael A Korcha. 2016. Conducting qualitative interviews by telephone: Lessons learned from a study of alcohol use among sexual minority and heterosexual women. *Qualitative Social Work* 15, 1 (2016), 118–133.

[25] Brooke Erin Duffy. 2017. *(Not) getting paid to do what you love: Gender, social media, and aspirational work.* Yale University Press.

[26] Brooke Erin Duffy, Annika Pinch, Shruti Sannon, and Megan Sawey. 2021. The nested precarities of creative labor on social media. *Social Media+ Society* 7, 2 (2021), 20563051211021368.

[27] Brooke Erin Duffy, Thomas Poell, and David B Nieborg. 2019. Platform practices in the cultural industries: Creativity, labor, and citizenship. *Social Media+ Society* 5, 4 (2019), 2056305119879672.

[28] Jared Duval, Ferran Altarriba Bertran, Siying Chen, Melissa Chu, Divya Subramonian, Austin Wang, Geoffrey Xiang, Sri Kurniawan, and Katherine Isbister. 2021. Chasing Play on TikTok from Populations with Disabilities to Inspire Playful and Inclusive Technology Design. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (Yokohama, Japan) *(CHI '21)*. Association for Computing Machinery, New York, NY, USA, Article 492, 15 pages. https://doi.org/10.1145/3411764.3445303

[29] Brianna Dym, Jed R Brubaker, Casey Fiesler, and Bryan Semaan. 2019. " Coming Out Okay" Community Narratives for LGBTQ Identity Recovery Work. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019), 1–28.

[30] Paul N Edwards. 2003. Infrastructure and modernity: Force, time, and social organization in the history of sociotechnical systems. *Modernity and technology* 1 (2003), 185–226.

[31] Martha S Feldman. 2000. Organizational routines as a source of continuous change. *Organization science* 11, 6 (2000), 611–629.

[32] Hank Green. January 20, 2022. So...TikTok Sucks. *YouTube* (January 20, 2022). https://www.youtube.com/watch?v=jAZapFzpP64

[33] Nicholas-Brie Guarriello. 2019. Never give up, never surrender: Game live streaming, neoliberal work, and personalized media economies. *New Media & Society* 21, 8 (2019), 1750–1769.

[34] Ole Hanseth and Kalle Lyytinen. 2010. Design theory for dynamic complexity in information infrastructures: the case of building internet. *Journal of Information Technology* 25, 1 (2010), 1–19.

[35] John Herrman. March 10, 2019. How TikTok Is Rewriting the World. *The New York Times* (March 10, 2019). https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html

[36] David Hesmondhalgh and Sarah Baker. 2010. 'A very complicated version of freedom': Conditions and experiences of creative labour in three cultural industries. *Poetics* 38, 1 (2010), 4–20.

[37] Bernie Hogan. 2010. The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society* 30, 6 (2010), 377–386.

[38] Samantha Jaroszewski, Danielle Lottridge, Oliver L. Haimson, and Katie Quehl. 2018. *"Genderfluid" or "Attack Helicopter": Responsible HCI Research Practice with Non-Binary Gender Variation in Online Communities.* Association for Computing Machinery, New York, NY, USA, 1–15. https://doi.org/10.1145/3173574.3173881

[39] Henry Jenkins. 2006. *Fans, bloggers, and gamers: Exploring participatory culture.* NYU Press.

[40] Howard J Karger. 1981. Burnout as alienation. *Social service review* 55, 2 (1981), 270–283.

[41] Nadia Karizat, Dan Delmonaco, Motahhare Eslami, and Nazanin Andalibi. 2021. Algorithmic folk theories and identity: How TikTok users co-produce Knowledge of identity and engage in algorithmic resistance. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021), 1–44.

[42] Erin Klawitter and Eszter Hargittai. 2018. "It's like learning a whole other language": The role of algorithmic skills in the curation of creative goods. *International Journal of Communication* 12 (2018), 3490–3510.

[43] Daniel Le Compte and Daniel Klug. 2021. "It's Viral!" - A Study of the Behaviors, Practices, and Motivations of TikTok Users and Social Activism. In *Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing* (Virtual Event, USA) *(CSCW '21)*. Association for Computing Machinery, New York, NY, USA, 108–111. https://doi.org/10.1145/3462204.3481741

[44] Charlotte P. Lee, Paul Dourish, and Gloria Mark. 2006. The Human Infrastructure of Cyberinfrastructure. In *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work* (Banff, Alberta, Canada) *(CSCW '06)*. Association for Computing Machinery, New York, NY, USA, 483–492. https://doi.org/10.1145/1180875.1180950

[45] Eden Litt. 2012. Knock, knock. Who's there? The imagined audience. *Journal of broadcasting & electronic media* 56, 3 (2012), 330–345.

[46] Yabing Liu, Krishna P Gummadi, Balachander Krishnamurthy, and Alan Mislove. 2011. Analyzing facebook privacy settings: user expectations vs. reality. In *Proceedings of the 2011 ACM SIGCOMM conference on Internet measurement conference*. 61–70.

[47] Renkai Ma and Yubo Kou. 2021. " How advertiser-friendly is my video?": YouTuber's Socioeconomic Interactions with Algorithmic Content Moderation. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021), 1–25.

[48] Karl Marx. 2016. Economic and philosophic manuscripts of 1844. In *Social Theory Re-Wired*. Routledge, 152–158.

[49] Gemma Newlands and Christian Fieseler. 2020. # dreamjob: navigating pathways to success as an aspiring Instagram influencer. In *The Regulation of Social Media Influencers*. Edward Elgar Publishing, 167–184.

[50] Victoria O'Meara. 2019. Weapons of the chic: Instagram influencer engagement pods as practices of resistance to Instagram platform labor. *Social Media+ Society* 5, 4 (2019), 2056305119879671.

[51] Brian T Pentland, Martha S Feldman, Markus C Becker, and Peng Liu. 2012. Dynamics of organizational routines: A generative model. *Journal of Management Studies* 49, 8 (2012), 1484–1508.

[52] Ayala Pines and Christina Maslach. 1978. Characteristics of staff burnout in mental health settings. *Psychiatric services* 29, 4 (1978), 233–237.

[53] Thomas Poell, David B Nieborg, and Brooke Erin Duffy. 2021. *Platforms and cultural production.* John Wiley & Sons.

[54] Cara Sainsbury. 2021. LGBTQ+ Content on TikTok and Everyday Activism. (2021). https://studenttheses.uu.nl/handle/20.500.12932/60

[55] Bryan Semaan. 2019. 'Routine Infrastructuring' as 'Building Everyday Resilience with Technology': When Disruption Becomes Ordinary. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW, Article 73 (Nov. 2019), 24 pages. https://doi.org/10.1145/3359175

[56] Bryan Semaan and Gloria Mark. 2011. Technology-mediated social arrangements to resolve breakdowns in infrastructure during ongoing disruption. *ACM Transactions on Computer-Human Interaction (TOCHI)* 18, 4 (2011), 1–21.

[57] Amanda Silberling. January 25, 2022. Maybe creator funds are bad. *TechCrunch* (January 25, 2022). https://techcrunch.com/2022/01/25/maybe-creator-funds-are-bad/

[58] Ellen Simpson, Dalal Samantha, and Bryan Semaan. 2023. "Hey, Can You Add Captions?": The Critical Infrastructuring Practices of Neurodiverse People on TikTok. *Proc. ACM Hum.-Comput. Interact.* 7, CSCW1, Article 57 (apr 2023). https://doi.org/10.1145/3579490

[59] Ellen Simpson and Bryan Semaan. 2021. For You, or For"You"? Everyday LGBTQ+ Encounters with TikTok. *Proc. ACM Hum.-Comput. Interact.* 4, CSCW3, Article 252 (Jan. 2021), 34 pages. https://doi.org/10.1145/3432951

[60] Anthony Charles H Smith, Elizabeth Immirzi, and Trevor Blackwell. 1975. *Paper Voices: The Popular Press and Social Change, 1935-1965.* Rowman and Littlefield.

[61] Ben Smith. December 5, 2021. How TikTok Reads Your Mind. *The New York Times* (December 5, 2021). https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html

[62] Susan Leigh Star and Karen Ruhleder. 1996. Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information systems research* 7, 1 (1996), 111–134.

[63] Catherine Knight Steele. 2021. Black feminist pleasure on TikTok: An ode to Hurston's "Characteristics of Negro Expression". *Women's Studies in Communication* 44, 4 (2021), 463–469.

[64] Tiziana Terranova. 2000. Free labor: Producing culture for the digital economy. *Social text* 18, 2 (2000), 33–58.

[65] Kurt Thomas, Patrick Gage Kelley, Sunny Consolvo, Patrawat Samermit, and Elie Bursztein. 2022. "It's Common and a Part of Being a Content Creator": Understanding How Creators Experience and Cope with Hate and Harassment Online. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (New Orleans, LA, USA) *(CHI '22)*. Association for Computing Machinery, New York, NY, USA, Article 121, 15 pages. https://doi.org/10.1145/3491102.3501879

[66] Alvin Toffler. 1980. *The third wave: The classic study of tomorrow.* Bantam.

[67] Maria Törhönen, Max Sjöblom, Lobna Hassan, and Juho Hamari. 2019. Fame and fortune, or just fun? A study on why people create content on video platforms. *Internet Research* (2019).

[68] José Van Dijck and Thomas Poell. 2013. Understanding social media logic. *Media and communication* 1, 1 (2013), 2–14.

[69] Loes Van Driel and Delia Dumitrica. 2021. Selling brands while staying "Authentic": The professionalization of Instagram influencers. *Convergence* 27, 1 (2021), 66–84.

[70] Emily A Vogels, Risa Gelles-Watnick, and Navid Massarat. 2022. Teens, Social Media and Technology 2022. (2022).

[71] Tom Wengraf. 2001. *Qualitative research interviewing: Biographic narrative and semi-structured methods*. Sage Publications Sage CA: Los Angeles, CA.
[72] Danielle Wiley. June, 2018. From Aspirational To Off The Cuff: Instagram's Evolving Aesthetics. *Forbes* (June, 2018). https://www.forbes.com/sites/forbesagencycouncil/2018/06/14/from-aspirational-to-off-the-cuff-instagrams-evolving-aesthetics/?sh=2b37024d1a2b
[73] Eva Yiwei Wu, Emily Pedersen, and Niloufar Salehi. 2019. Agent, gatekeeper, drug dealer: How content creators craft algorithmic personas. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (2019), 1–27.