

Technological Affordances, Algorithmic Curation, and Participatory Culture: A Narrative Literature of Review on Shaping The Audience's Attention on Short Video Platforms



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Abstract:

This narrative literature review explores how technological affordances, algorithmic curation, and participatory culture jointly shape audience attention on short-video platforms (TikTok, Reels, YouTube Shorts). Grounded in Gibson's ecological theory of affordances, Hutchby's socio-technical extension, and Jenkins' concept of participatory culture, the study synthesizes 49 key scholarships published between 2015–2025.

Findings reveal that technological affordances and algorithmic curation function as primary mechanisms for capturing and sustaining attention. However, these dynamics reinforce ideological echo chambers, filter bubbles, attentional fragmentation, and unequal visibility. Furthermore, It illustrates how platform design architecture and algorithmic logic compel users to adjust their behaviors to successfully fit within the system

The review identifies persistent gaps in non-Western contexts, longitudinal cognitive effects, and algorithmic transparency. It calls for an ethical platform redesign oriented toward societal well-being rather than purely commercial engagement metrics.

Keywords: technological affordances; algorithmic curation; participatory culture; audience attention; short-video platforms.

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Introduction:

a. Context and Rationale:

Probably, no one has not encountered or noticed the rise of the endless scrolling phenomenon fueled by short-form videos such as Instagram reels, YouTube Shorts, and TikToks, and others across various digital platforms. Their importance is defined basically in the attention economy and platform capitalism by their ability to capture public attention on a broader scale.

Tim Wu the author of the book, titled ``The Attention Merchants: The Epic Scramble to Get Inside Our Heads, which is published in 2016, and garnering strong positive evaluations on book recommendation websites. Tim Wu during an interview in The Guardian, explains how digital platforms capture human attention. Tim Wu points out a historical cycle in which communication technologies begin as open and creative platforms but eventually become dominated by commercial interests focused on harvesting human attention for advertisers. It describes these technologies, which have effectively become merchants, as entities that offer free content in exchange for users' attention, which is then sold to advertisers (Naughton, 2017). As it is well supported across several scientific and peer-reviewed works, the more watch time these technologies, platforms, and their components (including short-form videos) accumulate, the longer users remain consuming content, the more data these platforms can collect, enabling more targeted advertising .

To attract and sustain users' cognitive engagement for the maximum possible time with their short-form videos – the core of the attention economy – digital platforms rely on a complex structure (Terranova, T. 2012; Citton, 2014). Through their technological affordances, these platforms generate input data from users (user experience) (Hutchby, 2001; Vyas, Chisalita, & van der Veer, 2006) and, through algorithmic curation, govern output visibility (Gillespie, 2014; Napoli, 2014).

An increasing number of scientific papers have been published on short videos and their ecosystems, with scholars and researchers shedding light on their role in the attention economy. An initial search of the literature on short-form videos across various academic sources reveals that research aiming to answer the previous problem is scattered across multiple fields, with each focusing on only one specific perspective of the broader research question angles concerning Technological Affordances, Algorithmic Curation, and Participatory Cultures.

The concept of affordances in the context of technology and sociomateriality was first pioneered by Gibson in 1979. Later in 1988, Donald Norman adapted it to human-computer interaction (HCI). The concept was later introduced into communication and media studies by Ian Hutchby in 2001, who became the key figure in developing technological affordances as a framework for analyzing technology-mediated interaction. The idea of how algorithms govern visibility, content, and user behavior (which is known as algorithmic curation) was

significantly shaped by Gillespie in 2014 and Bucher in her successive works of 2012 and 2018, among others. The notion of participatory culture is most prominently associated with Henry Jenkins, particularly in his influential 2006 book *Convergence Culture: Where Old and New Media Collide*, which had earlier versions appearing in 1992 and 2001 works.

b. Significance and Contribution:

As previously mentioned in the introduction, short-form videos clearly dominate digital media consumption, it is easily observed by anyone and supported by many scientific researches and studies.

Platform Capitalism as defined by Srnicek (2017), who argues that engagement as behavioral data is the core commodity in platform business models. Similarly, the concept of platform society (van Dijck, Poell, & de Waal, 2018) shows how the architecture of platforms is deliberately optimized for data extraction and sustained user engagement, often at the expense of public values.

Together, these frameworks describe a phenomenon driven by commercial platform ecosystems that prioritize engagement metrics over other values, such as diversity, depth (Helberger, 2019), or well-being (Twenge et al., 2021). This prioritization is achieved through a combination of purposefully engineered design features, opaque algorithmic systems, and user-driven creative practices that work simultaneously to capture, retain, and monetize audience attention as the ultimate objective.

To bring the three mentioned components together into a clear and cohesive narrative and to examine their mutual interactions in today's digital media landscape of short-form videos, we need to employ narrative synthesis as an approach to tackle the research question. This approach ensures a comprehensive understanding of the entire picture within its new framework, rather than just its individual parts.

This paper employs a descriptive-synthetic narrative approach to provide a conceptual synthesis of how both technological affordances and algorithmic curation jointly shape audience attention and subsequent participation culture on short-form video platforms. The current review is guided by the following research questions:

1. How do technological affordances shape the way users engage with and interact on short-form video platforms?
2. In what ways do algorithmic curation logics shape audience attention and participation culture?
3. How does users' participation resist and reproduce algorithmic power structures?

This narrative literature review provides a comprehensive framework for research and critical analysis, contributing to revealing how technological affordances, algorithmic curation, and participatory culture interact to shape audience attention within the contexts of platform capitalism and the attention economy.

I. 1. Theoretical Framework:

A. Technological Affordances:

First and foremost, what is the linguistic definition of affordance? According to the Cambridge Dictionary (n.d.), an affordance is "a use or purpose that a thing can have, that people notice as part of the way they see or experience it." Alternatively, in a shorter form proposed by the electronic version of the Collins dictionary (n.d.) it is defined as "the way that an object may be used to perform a particular action."

In media studies, the concept of affordance builds on the work of three key thinkers. Originally, James J. Gibson (1979) defined affordances as the actionable possibilities offered by an environment relative to an actor's capabilities. This concept was adapted later as it is already mentioned in the previous section by Donald Norman in his works of 1988, and 1999, who reframed affordances as the perceived possibilities of what users believe they can do with an object. Ian Hutchby (2001, 2010) has a significant role in extending the concept to media and communication technologies, emphasizing how social actors interact with technological affordances.

To fully understand the concept in its original context, it is essential to revisit the seminal work of psychologist James J. Gibson, who first introduced the term "affordances" in his 1979 book, *The Ecological Approach to Visual Perception*. The "affordances" of the environment are what it offers the animal, what it provides or furnishes, whatever for good or ill. Whenever Gibson discusses affordances, he frequently cites the example of a chair, noting that it affords sitting for a human but not for an elephant; it illustrates that an affordance exists relative to the relationship between an object's properties and the actor's capabilities. In his 1979 work, Gibson argued that affordances are directly perceived properties from the environment available to an organism without the need for complex cognitive inference or intermediary mental representations (Gibson, 1979).

One of Gibson's key characteristics of affordances is their independent existence, exemplified by the concept of "sit-on-ability." He argued that this affordance exists in a flat, sturdy surface, whether or not anyone is present to perceive it. (Gibson, 1979, pp. 120-130).

Hutchby moves beyond Gibson's original ecological notion of affordances, which centered on organism-environment relationships, while steering clear of technological determinism. He views media affordances as socio-technical

constraints and enablers, emphasizing that what a technology allows or restricts depends on its use, interpretation, and integration into social practices. (Hutchby, I. (2001).

B. Algorithmic Curation:

Numerous scholars, including Tarleton Gillespie, Taina Bucher, and Philip M. Napoli, and others examine algorithmic curation by moving beyond its purely technological dimensions to explore the profoundly human aspects of interactions between algorithms and users.

Algorithmic curation is the automated method of choosing content where digital platforms organize, filter, and display information to users using computational systems that depend on data-driven approaches (Gillespie, 2018; Napoli, 2019). Instead of having human editors (traditional gatekeeper) determine what content is shown or given priority, algorithms identify and rank information based on patterns derived from extensive datasets of user activity, preferences, and interactions (Bucher, 2018; Gillespie, 2014). In other words it is an automated filtering and ranking of content based on data-driven predictions of user relevance and engagement, functioning as a form of non-human editorial gatekeeping. (Bucher, 2018; Gillespie, 2014).

Scholars such as Bucher (2018) and Gillespie (2014) in the mentioned sources challenge the view of algorithms as self-contained, neutral, deterministic, or purely technical entities, arguing instead that their power, function, and significance arise from their interactions within a broader socio-technical ecosystem. Taina Bucher moves beyond seeing algorithms as purely technical artifacts to understanding them as sociotechnical systems. Algorithmic power extends beyond direct actions such as censorship or recommendation. It configures the conditions of possibility for social interaction and meaning-making, exercising a form of productive power that generates new realities, connections, and subjectivities

C. Participatory Culture :

The concept of participatory culture was first comprehensively articulated by Henry Jenkins' 2006 white paper, *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. This seminal work established a foundational framework in media and cultural studies for understanding how audiences actively engage with and transform media in the digital age. Jenkins defines participatory culture as a media landscape where audiences move beyond passive consumption to actively engage, as contributors, creators, and collaborators in the production and dissemination of content. (Jenkins, 2006, 2009).

Jenkins (2006) adding that various digital tools have significantly lowered barriers to artistic expression and civic engagement, thereby enabling individuals with limited technical or financial resources to create and distribute media content. They not only facilitate content creation but also support its distribution and feedback processes, fostering communities of practice around shared media engagement. (Jenkins, 1992; Jenkins et al., 2009)

In participatory culture, experienced participants share knowledge and skills with novices through peer-to-peer learning, in contrast to formal institutional education. (Jenkins et al., 2009), Participants in a community feel their contributions are valued, whether through creating fan fiction, memes, mods, or engaging in collaborative problem-solving (Jenkins, 1992; Jenkins et al., 2009).

Before the algorithmic era, digital content on websites, forums, and portals was primarily human-curated, relying on editorial selection and organization by individuals rather than automated systems. The first generation of search algorithms (Google's PageRank algorithm), emerging in the mid-1990's (Brin & Page, 1998), was only capable of prioritizing website rankings, not yet determining the specific cultural content, such as videos, posts, or songs, consumed daily by users.

Algorithms have undergone significant changes since emerging as a key factor in media audience studies. Algorithmic constraints have given rise to algorithmic participation, whereby algorithms – automated systems or computational rules used by platforms such as Instagram, YouTube, and TikTok – play a pivotal role in shaping participatory culture by determining which content is seen, gets more views, by whom, and when. Consequently, as algorithmic participation becomes central to the communication process and shapes how users consume media content, it fundamentally transforms the development and functioning of participatory cultures.

II. Methodology: Descriptive-Synthetic Narrative Review

a. Review Type and Justification

This study, as already mentioned, employs a descriptive synthetic narrative review focusing on how scholars have treated the issue rather than on how the phenomenon functions directly, an approach designed particularly for complex interdisciplinary fields such as communication and media studies. The descriptive synthetic narrative reviews, unlike systematic reviews, make the conceptual integration and interpretive synthesis in the priorities (Baumeister & Leary, 1997; Snyder, 2019).

The current review, in its descriptive aspect, aims to map how the existing literature conceptualizes the relationship between technological affordances,

algorithmic curation, and participatory cultures in shaping attention dynamics on short-form video platforms, such as TikTok, Instagram Reels, and YouTube Shorts. While the synthetic side aims to develop new conceptual insights through an interpretive process, the dual approach can provide us with an in-depth understanding of the whole picture of the interactive relations between the concerned variables.

b. Literature Search Strategy

Used Databases are various and different: Scopus, Web of Science, Google Scholar, Communication & Mass Media Complete.

Keywords: "technological affordance," "algorithmic curation," "short-form video," "TikTok," "participatory culture," "attention dynamics." "Youtube Shorts," "Instagram Reels,"

Time frame: 2015–2025 (covering the rise of short-form platforms).

c. Selection Criteria

Inclusion: Works addressing technological affordances, algorithmic curation, and participatory culture in short-form videos (SFV), including peer-reviewed studies, conceptual papers, and empirical research.

Exclusion: Works that are unrelated to socio-cultural analysis and are solely focused on technical or engineering aspects.

A total of approximately 49 key sources were identified, of which around 40 were selected for thematic synthesis based on conceptual depth and relevance.

d. Analytical Procedure:

This review study's analysis phase consists of two steps: descriptive and synthetic. Based on the theoretical framework, the literature review is categorized into three main variables: technological affordances (interface design) in short-form video platforms, algorithmic curation (recommendation algorithms and visibility logics), and participatory culture (or participatory behavior). The synthetic step involves reading, coding, and abstraction using google notebook LM to assist as to develop integrative themes, including how affordances enable action, how algorithmic curation shapes visibility and then participation, and participatory attention economies, to identify intersections and cross-cutting patterns among these concepts. So the whole process of literature review provides a conceptual synthesis of **how technological affordances and algorithmic curation shape audience attention and subsequent participation on short-form video platforms.**

It is essential to mention that the present article was written with the assistance of the large language model Grok which was developed by xAI to ensure linguistic accuracy, stylistic coherence, and formal precision throughout the text.

III. Thematic Synthesis and Analysis

In the following section, we synthesize the literature across three interconnected thematic axes – technological affordances, algorithmic curation, and participatory cultures – to develop an integrated interpretation of how these dimensions shape attention dynamics in short-form videos (e.g., reels and shorts). As previously mentioned, the analysis adopts a descriptive-synthetic approach, integrating empirical evidence and theoretical perspectives to examine the socio-technical development of attention dynamics.

a. Technological affordances as Attention Structures

This section synthesizes the scholarly literature on technological affordances as mechanisms that structure and direct user attention. By systematically examining dominant theoretical frameworks, key tensions, and persistent research gaps, it elucidates how contemporary short-form video digital platforms are purposefully designed to capture, sustain, and monetize attention through a sophisticated interplay of technological affordances, algorithmic governance, and interface features.

The analyzed sources draw upon Gibson's original definition of affordances as perceived possibilities for action and conceptualize them as "action opportunities" that technological affordances offer to specific user groups. They define affordances as active properties emerging from the interplay between technology and the user, which both enable and constrain action, rather than merely technical features. Affordances are essentially relational and contextual, existing as a link between the user and the technological artifact, so the concept is positioned between **technological determinism** and **social constructivism**.

According to the analyzed studies, affordances exist objectively, independent of whether they are perceived or actualized by users. Nevertheless, it is the users' perception of these affordances that ultimately determines their behavioral responses and shapes interaction patterns with the technology.

In terms of capturing attention through affordances and structural designs, the analyzed sources provide a comprehensive overview of the process of targeting audience attention. According to Malik et al. (2025), technological affordances aim to capture and sustain user attention in consuming short-form video content as long as possible. Short form videos (SFV) utilize a "snackable" quality that requires narrative compression, condensing complex ideas into formats that can be rapidly

consumed. They achieve this through multimodal density, which includes visual dominance, strategic audio, and integrated text to demand the viewer's attention by reaching the maximum impact within the minimum time frames.

Attention as a socio-technical construct means that attention is shaped not only by technical systems but also by social and economic factors. This point has been argued by both Yves Citton (2014), and Tiziana Terranova (2012), who contend that attention is neither simply a personal, internal resource nor neutral or natural

Numerous psychological and technological affordances play a crucial role in implementing algorithmic mechanisms to target audience attention in a structured, curated manner, in terms of Recommendation Accuracy, Perceived Effortlessness, Perceived Serendipity, and Functional Affordances.

Another subtheme explored in the analyzed papers is the physical interfaces and user experience design, which employs various strategies to integrate the platform's attention structures into user practices. For instance, bucher (2018) shows how interface elements such as "like" buttons, "feeds" train users to think and act in platform-compatible ways. Interface designers utilize specific affordance mechanisms to nudge users toward desired behaviors, incorporating varying levels of friction to influence the performance of certain actions. So, nudging and friction are two additional significant points we can bring up with this review.

Designing effective digital interfaces (e.g., websites, apps, and platforms) using principles from cognitive psychology enables the creation of interaction designs that guide users' attention through the interface while minimizing mental overload. Affordance features consistently appear in the analyzed studies as key tools for managing users and generating revenue. These features primarily function to maximize profits, serve as control mechanisms, and facilitate data collection.

b. Algorithmic Curation and the Politics of Visibility

Looking at what the sources say, this central idea is divided into three main areas or subthemes: the first one is Algorithmic Mechanisms and Gatekeeping, the second one The Politics of Visibility and Amplification, and finally, the last one is Political/Identity-Based Visibility Outcomes.

Algorithmic curation relies on computer programs, mathematics instructions and rules to select, rank, and personalize content for users. On short-form video platforms like TikTok, algorithms mediate the user experience and generate customized content feeds (Malik et al., 2025).

These recommendation systems rely on engagement-driven logic, prioritizing data-driven metrics such as likes, shares, view duration, and comment velocity over traditional aesthetic judgment or journalistic significance, with the primary goal of maximizing profit and user retention. Rather than individuals deciding and selecting their preferred content, systems now assume these roles, prioritizing certain content over others. These tools function primarily as selectors and filters, operating as automated gatekeepers (Gillespie, 2014; Bucher 2018). Recommendations aim to align with users' preferences, addressing their diverse information needs (Napoli, 2019). These are typically automatically curated and organized updates (Qi, 2025). The algorithmic systems control visibility and attention online, acting as an opaque or hidden but effective gatekeeper. (Gillespie, 2014; Bucher, 2018; van Dijck, Poell, & de Waal 2018).

The provided sources discuss that the content designed to grab attention clashes with how it affects everyone overall. Specifically, systems keep people hooked by showing them things they're likely to enjoy – determined through prediction – yet this approach carries wider consequences. Instead of broadening minds, tailoring content can actually trap people within their own viewpoints in otherwise feeding them only what they already agree with. The goal isn't to show varied perspectives; instead, the algorithmic systems chase clicks and reactions, favoring revenue above all else.

The primary mechanism for enhancing user engagement lies in the algorithmic tailoring of content feeds to users' inferred preferences which means the process that is variously conceptualized by scholars as behavioral inference, predictive personalization, or algorithmic anticipation (Bucher, 2018; van Dijck, Poell, & de Waal 2018). The algorithmic criteria prioritize content based on metrics like likes, shares, and view time, maximizing engagement for commercial profit. The main consequence of this process of personalization is that users as it is already mentioned are predominantly shown content aligned with their existing preferences and inferred interests. This practice, while increasing engagement, carries the significant risk of reinforcing ideological echo chambers and filter bubbles (Pariser, 2011; Bakshy et al. 2015).

Content creators frequently prioritize gaining the algorithm's favor to boost their reach and achieve virality, rather than relying on interpersonal sharing. This is because visibility depends on how closely content aligns with the algorithm's criteria: compliant content is amplified, while non-compliant content is demoted or ignored. Consequently, high engagement metrics are essential for visibility (Qi, 2025).

c. Participatory Cultures and Algorithmic Agency

The analyzed sources on this theme discuss the extent to which algorithmic literacy is needed in the context of modern short-form video (SFV) platforms, such as TikTok and Instagram Reels. They highlight the necessity of acquiring specific knowledge that empowers users to understand how recommendation systems operate and function, as well as how they can reinforce existing power dynamics. As previously noted regarding the unseen roles of gatekeepers, content creators must develop this literacy in order to interact strategically with these automated systems and maximize content visibility.

1. Adopting and Adapting Algorithmic Logic for Visibility

The papers examine how users attempt to understand content prioritization, leading them to develop "algorithmic folk theories" (Bucher, 2018), as adaptation strategies to enhance visibility and content presentation. For content creators, visibility requires playing a "game," where they apply key strategies, including crafting a strong visual hook, using direct calls to action, and participating in trend homogenization to align with perceived algorithmic preferences. Consequently, they actively prioritize engagement metrics like likes, shares over traditional newsworthiness, framing their content as "shareworthy."

2. Fan Practices and Remix Cultures

The text examines how the fan practices and memetic tools are harnessed for advocacy and political expression, citing the #OkBoomer trend as an example of how shared audio templates enabled lip-sync activism and consciousness-building through features like the Duet function (Zeng & Abidin, 2021). The platform's design features, which afford creativity, facilitate memetic replication and imitation (mimesis), leading to "imitation publics" connected through shared content rituals. These features also encourage vernacular creativity focused on everyday life, resulting in complex multimodal memes that incorporate layers of sound, text, and video.

3. Influencer Strategies and Visibility Labor

The corpus reveals the demanding work and strategies employed by creators and influencers on algorithmic social media platforms to achieve and sustain visibility, highlighting that mastering algorithmic fluency is a critical task for creators to produce successful content while functioning simultaneously as artists and effective marketers. It also reveals the use of the performed authenticity strategy, whereby influencers share personal struggles to build audience trust and broaden acceptance among viewers (Malik et al., 2025).

As previously mentioned in numerous times, visibility on the platform is often driven by algorithmic boosting (Schafer et al., 2025), which is typically

described as sudden and significant, rather than relying on traditional viral sharing. Consequently, creators – reflecting a sense of responsibility toward their rapidly acquired audience – frequently adapt their content by posting more often and producing material topically similar to their boosted videos .

4. Subversion and Resistance to Algorithmic Logics

The analyzed sources explain that algorithmic literacy – which we have previously described – provides a sophisticated understanding of how these systems operate and enables users to strategically manipulate platforms for increased status or distribution (Schafer et al., 2025). It outlines various methods by which platform users engage in subversion and resistance against governing algorithmic logics. It details active forms of algorithmic resistance, kind of coded language such as employing algospeak to bypass moderation filters or directly rallying followers to engage with content to force visibility when users feel their material has been unfairly suppressed. Overall, the source describes how users may have the ability to engage in challenge hijacking to subvert popular trends and promote alternative narratives(Cervi & Divon, 2023).

d. Attention as Cultural and Economic Capital

According to Citton (2014) and Fuchs (2014), On short-form video (SFV) platforms the intersection of technological affordances, algorithmic curation, and participatory culture culminates in a new form of attention capital, which operates simultaneously as cognitive focus, cultural recognition, and economic resource. When these dimensions converge, the capacity to capture attention translates into symbolic status and monetizable influence.

1. Attention as Cultural and Economic Capital

The analyzed sources examine how attention operates as a critical form of capital within platform-based digital environments, such as those hosting short-form videos. Maximizing users' engagement is the primary objective of platforms, which are driven by advertising and data monetization to generate revenue. Thus, engagement begins with attention, which in this context serves as economic capital. Concurrently, it also functions as cultural capital for creators and influencers, translating into social status, fame, and credibility - factors that often play an essential role in unlocking career opportunities such as brand sponsorships. Ultimately, platforms serve as powerful mediators that prioritize business outcomes, such as user retention and advertising impressions, over purely aesthetic or ideological missions.

2. Algorithmic Loops: Attention, Monetization, and Homogenization

The analyzed sources primarily discuss how algorithmic curation on social media platforms functions as the core mechanism for attracting, capturing, and exploiting user attention in driving the main objective of monetization, focusing specifically on systems like TikTok's "For You" page (Entrena-Serrano, 2025). These systems operate with a single primary purpose: to maximize user engagement. They achieve this through hyper-personalized feeds and fully tailored interface design - known as affordances-, encouraging continuous and effortless passive consumption (Qi, 2025). The provided texts outline the cyclical attention loops, explaining that user interactions create feedback loops working continuously to optimize the algorithm, leading to the amplification of high-performing content and contributing to both content homogenization and potential ideological enclosure through selective exposure.

IV. Discussion

In the following section of this narrative review, we discuss three main points: first, how the core variables of this study (affordances, algorithms, and participation) converge to form a distinctive attention ecology; second, the theoretical and methodological gaps identified across the entire sample; and finally, the implications for communication and media research.

A. Integrating Affordances, Algorithms, and Participation

Synthesizing across all identified and extracted themes, this review conceptualizes how technical affordances, algorithmic curation, and participatory culture converge on short-form video (SFV) platforms to form a complex attention ecology, characterized by continuous mutual shaping among these elements as they co-construct a communicative environment. Together, they form a socio-technical system – which we can term attention infrastructure –that captures user engagement, transforms it, and monetizes it in a highly profitable manner.

The continuous mutual shaping process on short-form video platforms occurs through a three-stage loop. This cycle begins with affordances guiding behavior by exerting varying levels of pressure on socially situated subjects, as described by Carlos Entrena. The platform's technological design – defined as the possibilities it offers for action such as Recommendation Affordance, participatory features, perceived effortlessness, and Visibility – sets the initial parameters for user interaction.

Next, algorithms filter visibility, acting as the core information gatekeepers in this attention ecology. They function as critical mediators that determine which content is seen, thereby altering which content reaches the audience. This means amplifying particular material (labeled as newsworthy) designed to stimulate reactions, which can lead to heightened emotional intensities and aesthetic

uniformity while simultaneously limiting exposure to diverse viewpoints, creating "echo chambers" and "filter bubbles". Conversely, this type of algorithmic gatekeeping suppresses certain user behaviors through tailored recommendations, determining which material, content, creative works, or information remains unseen – regardless of their intrinsic merit or any other logical rationale.

Finally, in response to the pervasive influence of algorithmic gatekeepers, design constraints, and algorithmic rewards, users – especially content creators – adapt and develop practices aimed at maximizing their visibility, social connectivity, and utility. In doing so, they formulate "folk theories" – intuitive, informal beliefs – that represent the algorithm as an agent, gatekeeper, controlling their success. These theories explain the outcomes and effects of these systems, ultimately aligning users' experiences.

Overall, the provided corpus illustrates how platform design architecture and algorithmic logic compel users to adjust their behaviors to successfully fit within the system

B. Theoretical and Methodological Gaps

By analyzing the provided corpus of scientific papers – focusing on theoretical and methodological gaps – it is clear that traditional research methods are not capable of providing a comprehensive explanation of the dynamic interplay among technological design, governance mechanisms, and user behavior. Thus, what is needed is a shift toward studying algorithmically curated media. This body of narrative literature reveals three significant gaps that must be addressed in future research to build a robust, generalized understanding of platforms like TikTok, Instagram Reels, and YouTube Shorts.

1. Scarcity of cross-platform comparative analyses.

A significant gap in the existing body of work is the limited number of systematic comparisons and analyses linking technical features, consumption patterns, and user psychology across different short-form video (SFV) platforms such as TikTok, Instagram Reels, and YouTube Shorts.

Although the main variable concerns short-form videos – a core concept shared across the entire corpus – each platform possesses unique characteristics and features in terms of duration, editing, audience profile, and distribution algorithms, which differentiate the user experience. We have found that, despite acknowledging that different platform architectures afford different usages, many studies focus on only one platform and later generalize their findings to all social media platforms.

One significant idea that emerged during the analysis is the need to explore the entire user journey involving short-form videos and to understand how consumers navigate cross-platform ecosystems, as well as how user trust and behavior transfer between platforms. This requires multi-platform user journey analysis.

Another issue worth highlighting in this discussion of methodological flaws concerns geographical and cultural bias. It is widely recognized that cross-platform comparisons are typically confined to a single region—or at most a few closely related ones—thereby directing focus toward facilitators and outcomes that are specific to those locales. Ongoing studies should focus on comparing user preferences and cognitive responses across short-form and long-form video platforms to fully grasp the role of video length in shaping user experience and platform success.

Researchers frequently face difficulties in comparing platforms due to restricted data access, compounded by inconsistent methodologies across studies. The opaque nature of algorithms—often described as a “black box”—makes it challenging to understand how recommendation systems function technically. API restrictions, such as those imposed by TikTok and Meta on influential user data, hinder data collection, introduce sample bias, and complicate the comparison and interpretation of results.

Algorithmic governance interacts with participatory creativity - each shaping the other - creating a key theoretical governance gap, particularly when it comes to how platforms change creative work, drive, and personal ethics online. Algorithms have now become the primary gatekeepers of creative visibility, fully supplanting traditional human editors and curators. This new system of governance places substantial constraints on content creation.

Algorithmic curation fundamentally steers creative choices, tending to privilege content that is quick, visually pleasing, and emotionally evocative over content that is longer, text-heavy, or contemplative, because the algorithm is optimized for high short-term engagement.

C. Need for longitudinal and multimodal approaches.

The dependence on short-term data collection makes it hard to grasp how short-form videos (SFVs) affect people over time. So, upcoming studies need to look into lasting changes in thinking and social behavior caused by personalized SFV content picked by algorithms. Most current scientific papers rely on cross-sectional data, making it hard to track causal relationships. Future work could do better with long-term tracking or hands-on trials that give stronger insights.

Longitudinal studies are necessary to measure how algorithmic curations shape what people see online (exposure) - and whether that boosts division across time (polarization). Take, for instance, the need for longitudinal walkthrough methods that track ongoing user activity, showing shifts in suggested posts while uncovering clearer signs of growing echo chambers or broader viewpoints.

Most existing studies rely heavily on quantitative methods; therefore, the field of SFVs requires the adoption of qualitative methodologies across diverse platforms and geographic regions to enable a deeper analysis of user experiences.

It is significant to highlight the semiotic structures and persuasive tactics in the provided papers, as the subtle persuasive tactics employed in SFVs and their unique semiotic structures remain relatively understudied, despite user engagement and content virality being well-covered. The same applies to techniques developed for still images: they often fail to generalize to fast-paced, dynamic short-form videos, necessitating novel solutions and fresh approaches.

The majority of technical affordances studied in the analyzed corpus concerned recommendation accuracy, serendipity, perceived effortlessness, and their impact on compulsive or continued use. The status quo makes us feel a need to dig more deeply into this field, which will open the door for future research to identify additional relevant affordances of SFV platforms.

Power and inequality represent another critical theme emerging from this narrative literature review. More scholarly work is needed to critically examine SFV platforms and their underlying algorithms, particularly their lack of transparency and roles in the systemic reinforcement of bias and structural inequalities, as this opacity hinders a full assessment of algorithmic governance. In addition to power and inequality, another significant yet rarely noticed issue is the concrete socio-political repercussions of SFVs in diverse cultural contexts. These repercussions remain relatively understudied. Future studies should explore the relationship between culture, economic status, and device access, as these factors represent the potential influence of socio-cultural and economic elements on user behaviors exhibited on digital platforms.

The final gap, which concludes this section, encompasses both geographical bias and the marginalization of groups and identities. Despite this narrative review's purposeful and deliberate corpus selection, it reveals a clear imbalance in language and sampling regions marked by Western and English-language dominance that mirrors structural inequalities in academic publishing. Moreover, there remains a dearth of substantial studies on biases related to race, ethnicity, and social class within recommender systems. Equity-focused research is also needed to examine how algorithmic pressures intersect with gender, race, and precarity in professional fields such as journalism. Future systematic reviews should

therefore explicitly incorporate multilingual searches and region-specific repositories.

D. Implications for Communication and Media Research

Needless to say, the rise of short-form video platforms such as TikTok, Facebook Reels, and YouTube Shorts centered on algorithmic curation has profound implications for communication and media research. These platforms fundamentally transform user participation, content curation, and the exercise of communicative power. The following discussion aims to illuminate the redefined concepts of participation, agency, and visibility within these algorithmic environments.

The current literature thoroughly examines the extent to which user participation is transformed by algorithmic media environments, shifting from traditional models of self-directed social networking, in which users autonomously select their desired content to a new system governed by mathematical instructions, computational rules, and an attention economy that treats engagement as capital. Consequently, user experience is now shaped primarily by automated inference rather than direct choice, giving rise again after a while to the concept of passive consumption. This shift, driven by features such as the "For You Page", redefines user identity from the networked self to the algorithmized self. The text highlights how algorithmic folk theories shape user behaviors, which in turn feed back into the system as data, creating a continuous feedback loop. However, despite the underlying control exerted by algorithms, users can demonstrate strategic agency, gained through algorithmic literacy, to actively refine their content feeds. Finally, we can discuss the implications for collective discourse—the shared ways of speaking, thinking, and representing ideas within a group, community, society, or institution—and for activism. This analysis reveals that algorithms can reinforce ideological echo chambers while simultaneously facilitating digital activism by shaping collective discourse, though they often prioritize brevity and emotional impact over nuanced, in-depth narratives.

The text provides a comprehensive analysis of how algorithmic curation reshapes communicative agency and visibility, effectively replacing the traditional famous notion of human gatekeeper and fundamentally transforming the mechanisms of visibility and power in the digital sphere.

This last part of discussion explains that algorithms, sets of mathematical instructions or rules executed by computer programs, have now assumed the role of selecting and organizing content based on opaque criteria. This shift compels content creators to develop folk theories and strategically adapt their work to maximize engagement metrics, such as likes and shares. Furthermore, the source discusses how the technical features and design of platforms constrain users'

communicative agency, compelling successful creators to not only master platform-specific visual conventions but also employ strategies of algorithmic resistance, such as countering bias or bypassing algorithmic barriers, to gain greater visibility. Ultimately, strategically appeasing the quasi-authority of the algorithm has become a necessity for communicators, as platform logic constructs visibility and credibility in the new digital landscape of short-form videos.

V. Conclusion

Drawing the discussion to a close, this descriptive-synthetic narrative review has examined the interactions among technical affordances, algorithmic curation, and participatory cultures, as well as their collective role in shaping attention dynamics on short-form video platforms. By integrating the theoretical frameworks of technical affordances, algorithmic culture, and participatory media scholarship, the review demonstrates that attention is not an incidental outcome of platforms but a deliberate socio-technical process involving the design and negotiation.

Technical affordances act as sensors that structure the temporal dimensions of interaction; algorithmic curation controls and concurrently regulates content visibility and value; and participatory culture sustains engagement cycles that continuously feed back into algorithmic optimization in iterative loops. This triadic interplay constitutes a platformized attention economy, wherein user creativity and platform control are mutually reinforcing.

To enable communication and media scholars to better understand the evolving infrastructures that shape how contemporary societies see, create, and attend, future research should further explore comparative platform ecologies, algorithmic literacy practices, and ethical frameworks for visibility governance.

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