# Algorithmic Bargaining: Negotiating Identity with Artificial Intelligence

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Abstract: Social media has become a ubiquitous feature of postmodern life, impacting important fields such as the economy, politics, and interpersonal communication. Over the past eight years, TikTok has emerged as a front runner in the social media platform ecosystem; part of its unparalleled success lies in the unique precision of its AI-informed algorithm. This research is concerned with the lesbian community on TikTok, specifically its semantic decision-making and communicative behaviors. This population serves as a case study of how the anticipation of algorithmic outcomes, such as visibility and content moderation, affect how lesbians address their sexual orientation on TikTok. The result of this inquiry finds that in addition to using humor, storytelling, and various descriptors when addressing their sexual orientation, lesbians on TikTok engage in algorithmic bargaining to achieve their content creation goals. Furthermore, this research demonstrates how algorithms learn and perpetuate social marginalization through the normalization of shallow self-expression and user algorithmic bargaining.

# 1. Introduction

The ways in which humans communicate with one another and express themselves have been fundamentally revolutionized through social media. These platforms allow individuals to connect asynchronously and independently of location, with a host of features to facilitate novel forms of interaction. Additionally, social media has widened one's social circle; social media users are able to connect with new contacts, with whom they otherwise would not have interacted, based on various similarities, differences of opinion, and affinities. These postmodern forms and networks of communication are intensified by the enormous amount of time spent on social media platforms. Social media platforms have evolved beyond simple communication tools; they represent a space wherein users not only socialize with one another but also are socialized in various social and political realms. Furthermore, the introduction of artificial intelligence (AI) informed algorithms into social media platforms represents a new actor in the communication dynamic between users and the platforms they use. Algorithms are "computer programs that define a series of steps that involve operating on data to produce some outcome" (Gillespie, Boczkowski, and Foot 2013 in Cotter 2019, 5). In social spaces where interaction is mediated by these programs, users must understand and contend with algorithms in order to communicate.

This research will examine these dynamics through a case study of US-American lesbians' semantic decision-making and communicative behaviors on TikTok with specific attention on the morph le\$bean. In doing so, it will introduce the concept of algorithmic bargaining, detailing how lesbian TikTok users alter their speech and behavior to achieve specific outcomes mediated through TikTok's algorithm. TikTok provides both a density of source material and a unique

algorithmic environment to understand user-AI interactions pertaining to self-presentation and identity negotiation. TikTok is a relatively new social networking service where users can create, edit, share, and view short-form videos, called TikToks. In video creation, TikTok offers various editing capabilities that have simplified previously technologically cumbersome barriers. Once a TikTok has been made and edited, users are able to share them with various audiences, including just themselves, their followers, or the entirety of TikTok's user base. The latter serves as the most popular chosen audience; therefore, TikTok users tend to make their TikToks publicly available (Wang 2018). This behavior not only influences content creation but also content consumption. Publicly visible TikToks are made available to the general audience through the platform's For You Page (FYP). The FYP is regulated through an AI-informed algorithm that also serves as the application's homepage, continuously playing TikToks calculated to generate the most user engagement. Unlike other social networking services, TikTok's algorithmicallydriven individualization drives users to not build their own feeds by following accounts; rather, they acquiesce to the freedom from choice and consume what the algorithm shows to them. Although proprietary, the FYP has been shown to use the following inputs: user interactions, i.e., the user's history on the application in terms of video consumption and interaction; video information, such as the sound or hashtags associated with the recommended video, and; device settings like current location and language preferences (TikTok Creator Portal 2022). Criticisms of algorithmically-driven social media feeds have chastised their opacity for both creators and consumers, leading to a dangerous unknown for both visibility and data privacy (Smith 2021). In order for their content to be viewed, content creators must bear the algorithm in mind, as it serves as the gatekeeper to their target audience.

In 2019 and 2020, investigative journalists revealed TikTok had been engaging in both explicit censorship and implicit algorithmic suppression, known as shadowbanning, against socially marginalized groups such as BIPOC, people with disabilities, and the LGBTQ+ community (Hern 2019; Köver and Reuter 2019; Biddle, Ribeiro, and Dias Whereas in some instances the platform claimed to initiate these measures to prevent bullying, more nefarious intentions have also been brought to light. one internal document, TikTok instructed moderators to shadowban socially marginalized groups so that they would not, "decrease the short-term new user retention rate" thereby signaling an economic incentive to silence these populations. During this time period, TikTok, still in its nascency in the US market, employed Chinese moderators for its international market, leading to sociocultural bias against these groups. Although TikTok has since employed local moderators, this history of censorship has left many content creators critical of and confused by its moderation practices, which are then exacerbated by the opacity of the algorithm that drives the FYP and therefore their visibility (Fingas 2020). The lesbian community represents an intriguing target population to understand identity negotiation in AI-informed social media environments due to the complex considerations content creators make and the complicated history behind lesbian visibility, community, and social acceptance.

The issue of negotiating identity in algorithmically-driven social media environments will be addressed through the following research questions:

- 1. How do lesbian TikTok content creators in the US address their sexual orientation? What considerations do they make in this process?
- 2. Do algorithmic outcomes and the anticipation thereof play a role in the semantic decision-making and communicative behavior of lesbians on TikTok when addressing their sexual orientation? If so, then to what extent?

This article will proceed with a brief summary of the most relevant literature for this research's problems and questions. It will then continue with a presentation of the conceptual framework employed by this research, including an introduction to the concept of algorithmic bargaining. This will then be followed by an overview of this research's methodology and the results to the research questions. Finally, these results will be contextualized through a discussion concerning the interpretation and implications. This research will unveil the shifting power dynamics between user, AI-informed algorithm, and platform, demonstrating AI's learning and furthering of social marginalization. It will also unearth strategies that content creators employ to best the algorithm, known as algorithmic bargaining.

# 2. Literature Review

To understand the empirical context within which this research is situated, this literature review will explore previously addressed focal points concerning TikTok, algorithms, and AI. Given the relatively nascent stage of TikTok, academic research on the platform is sparse. Relevant to the topic of lesbian semantic decision-making and the role of algorithms in these processes are works concerning user behavior and experiences, the function and impact of the TikTok algorithm, and the platform's governance and political influence. Beginning with research on TikTok's algorithm, a team of researchers from Nanyang Technological University in Singapore explored the concepts of AI and human agency on TikTok. Through interviews with 25 users, they uncovered that users and AI shared moments of collaboration through mutual benefit and negotiation. In cases of content creation, AI will facilitate user agency whereas user agency is used to inform AI-agency, especially in moments of unnatural behavior to achieve specific algorithmic outcomes. Users disclosed that they also diminish their agency in specific situations by not engaging with content. Overall, users had multifaceted opinions towards AI-agency on the platform; whereas they appreciated the degree of personalization in content curation, they critically understood that this service came at the expense of both their data privacy and user agency. Interactions between users and AI on TikTok have generated a novel form of attention capture on the platform through the cycle of content recommendation and consumption. Niche communities are then able to form around these interactions on the fast-paced platform with powerful trends (Kang and Lou 2022). This research demonstrates that users and AI consider each other in their respective calculations on TikTok.

Human-computer interaction has also led scholars to propose new understandings of how AI and algorithms affect user experience. Bhandari and Bimo suggest the term, "algorithmized self" as a result, "deriving primarily from a reflexive engagement with previous self-representations rather than with one's social connections" (2020, 3). This concept is juxtaposed with boyd, Papacharissi, and others' idea of the networked self that is centered around social connections. Thus, the algorithmized self on TikTok is formed through interactions with the algorithm in content creation and consumption. One additional study has specifically researched user-algorithm interaction for the LGBTQ+ community on TikTok, interviewing 16 LGBTQ+ TikTok users on their experiences with the algorithm, platform affordances, communities, and analog experiences. After an initial learning curve, participants found that the FYP reacted to their interactions with content so that users could steer the algorithm towards specific content recommendations. The presence of LGBTQ+ communities on TikTok, both actively sought out and serendipitously discovered, was also reported by participants to influence their self-conceptualization and ideas of visibility on the platform. Despite these positive

algorithmic interactions within the LGBTQ+ community on TikTok, participants also disclosed negative experiences with their FYPs in the form of: being "outed" by the algorithm, lack of representations of diverse LGBTQ+ experiences, and exposure to homophobic or generally unwanted content on their FYP (Simon and Semaan 2021). Both the concept of the algorithmized self and this collection of LGBTQ+ experiences on TikTok demonstrate not only the effect that human-algorithm interactions have on identity and platform behavior but also the influence that users have over the algorithm to guide their experience towards their intentions through the algorithm.

It is important to note that TikTok not only has an effect on individual conceptualizations and manifestations of identity but also on the collective level in terms of visibility and community. In TikTok Cultures in the United States, the editor of the anthology notes that, "... algorithmic personalization that enables identities, communities, and cultures to take shape on the platform, a phenomenon that quickly spills into the analog world as TikTok content goes viral. As a result, TikTok becomes US culture, and US culture becomes TikTok" (Boffone 2022, 7). In a chapter on the creation of queer female and nonbinary communities through TikTok, one researcher documented instances of the rejection of heteronormativity in two case studies. They found that during the Coronavirus pandemic, queer female and nonbinary content creators used both discursive and theatrical tactics to build community in a time when in-person events were unavailable. The second case study was centered on Archie Bonogiovanni, a genderqueer cartoonist that recommends sex toys. Through their normalization of queer sex education, Archie experienced content moderation while actively rejecting heteronormativity (Skinner 2022, 79 in TikTok Cultures in the United States edited by Trevor Boffone). Further research has confirmed the importance of social media as a space for youth to practice socially marginalized behavior in the digital sphere to remain anonymous and form communities. Given the lack of safe analog spaces available to LGBTQ+ youth during the Coronavirus pandemic, TikTok provided an important resource for these youth to form their identities, social networks, and find support for the coming out process. In addition to these positive aspects, users were further documented as being able to manipulate, "the strength of the TikTok algorithm to create an environment composed of positive gender and sexual minority content" that would otherwise potentially include homophobic and transphobic content (Hiebert and Kortes-Miller 2021, 14). These pieces of literature demonstrate both the impact TikTok and its algorithm can have on LGBTQ+ users and communities at large, in addition to how these communities bend the algorithm to their will.

User experiences on TikTok differ from other social media platforms in a variety of ways. One of TikTok's peculiarities is the importance of sounds to their content. Whereas other platforms place the emphasis on the visual aspects of content, TikTok allows for sounds themselves to go viral and become memes. Described as aural memes by TikTok scholars Abidin and Valdovinos Kaye, sounds on TikTok are vital to storytelling, cueing and contrasting visual effects, creating a specific ambience, and streamlining content. Sounds on TikTok have also been documented to represent tone policing and the performance of mediated identities, as demonstrated in two case studies. Demonstrating tone policing, the musician Absofacto rallied his fans and other TikTok users to decouple his song "Dissolve" from pro-incest content on the platform through flooding the sound with alternative uses. The second case study of Rocky Pattera's "I'm An Accountant", sex workers recontextualized the sound to share their professions in accordance with TikTok's community guidelines (2021). These findings do not simply elevate the importance of sounds within TikTok but furthermore underscore the multimodality of the platform and the different areas of meaning-making and decision points on the platform available for TikTok content creators to manipulate according to their goals.

Using the framework of communicative forms, one researcher sought to explain user behavior on TikTok. Understanding content output as cultural artifacts, the author outlined TikTok-specific language, aesthetics, memes, and the meaning-making that derives from their usage. Based on Shifman's three memetic dimensions (content, form, and stance), six communicative forms were identified, specifically: comedic, documentary, communal, explanatory, interactive, and meta. These various communicative forms were often used in an ephemeral way so that trends often developed and died down, creating a productive breeding ground for memes (Schellewald 2021). More specific attention has been given to self-disclosure behaviors of adolescent girls on TikTok, analyzing the dimensions, factors, and functions of content creation. Most of these behaviors had an evaluative, as opposed to descriptive or explicit, nature and were mood-dependent. They also occurred in anticipation of positive or negative reaction, expressed feelings, offered comfort to the content creator, and tended to tell the truth without being overly intimate (Claresta and Tamburian 2021). The overall communicative behaviors of the general TikTok population provide insight into the behavioral norms on the platform.

In addition to universal communicative behaviors, further scrutiny has been given to political communication and socialization on TikTok. Research on political communication on TikTok noted that political communication happens in interactive and multimodal communication trees. This alters the basis of what is content, stating that "TikTok users do not just merely circulate content and comment on it; they become the content" (Medina Serrano, Papakyriakopoulos, Hegelich 2020). With users' images and their own political ideas as the heart of content on TikTok, consumers and creators alike are rendered as more active agents in the communicative process. Another study on countercultural and subversive communication on TikTok found that the platform has the capacity to increase visibility to sub- and countercultral activity as it eliminates geographic and social boundaries. On the other hand, it also suppresses these discourses as it is moderated and regulated. The authors noted the communication logic on the platform as, "wasteful online play, social media political expression, and cultural evolution" (Seiffert-Brockmann, Diehl, and Dobusch 2018, 2862 in Mackenzie and Nichols 2020, 287). Political communication and socialization are relevant to understanding lesbian semantic decision-making and behavior on TikTok not only because of the larger implications of the algorithm's influence, but also due to the intersection of personal and political issues for the LGBTQ+ community.

Beyond these previous works related to TikTok, other research has analyzed the introduction of AI into social media. Colloquially understood as "the algorithm", processes of machine learning, deep learning and automated-decision making inform the content suggestion, curation, and moderation processes on social media platforms. Although misunderstood and opaque systems, users know that their understanding of how "the algorithm" works will affect their outcomes and experiences on AI-informed platforms. What is often underestimated, however, is the role of the user in teaching AI systems. In a study of AI embedment in regards to moderating inappropriate content and misinformation, one scholar noted that AI is a, "material-discursive apparatus, in which there is an ongoing and intra-active relationship between the 'material (re)configurings or discursive practices that produce material phenomena in their differential becoming' (Barad 2007: 170)" (Grandinetti 2023, 1274). Despite rumblings of technological determinism espoused by platforms in praise of their AI, these systems remain neither neutral nor objective; they implement a platform's goals and hold biases (Grandinetti 2023, 1276). In addition to this general confusion of what is colloquially understood as an algorithm, there is also a divide between how these are defined by social scientists and computer scientists.

Contemporary understandings of algorithms within the field of critical algorithm studies define them as largely not pertaining to a specific technical feature but rather broader technosocial systems that are entangled in culture (Seaver 2017, 3). Furthermore, studies of contemporary AI have taken the stance that human users and AI work in harmony to create a hybrid network of human cognition networked through media technology. Humans in the age of deep learning play the crucial role of unknowingly providing training and verification data that subsequently creates a power dynamic between man and machine (Mühlhoff 2020, 1869). Specifically within the context of social media, Mühlhoff notes that, "the power relation between user and machine can best be described as a social 'exploit' (cf. Galloway and Thacker, 2007) in the rich sense of the term that includes its meaning in hacker culture: an exploit is a way of taking advantage of a system through a loophole, by hijacking and subtly modulating its functions" (2020, 1877-76). These pieces demonstrate the mystique surrounding AI-informed algorithms, their influence on user experience, and the shifting power dynamic between user, platform, and algorithm.

# 3. Conceptual Framework

In addition to a general lack of TikTok-specific literature focusing on the lesbian experience on the platform, this research adds to previous literature by specifically analyzing the intersection of content creation as part of a marginalized identity. The conceptual framework of this interdisciplinary research takes concepts from critical algorithm studies, human-computer interaction, and platform studies to understand user semantic behavior in the context of algorithmically-mediated social media. In this environment, three actors are at work: users, algorithm, and platform. Users can be understood as both content creators and consumers; platforms are the social networking services that house and manage communications, in this research, TikTok. An algorithm, at a basic level, is defined as, "computer programs that define a series of steps that involve operating on data to produce some outcome" (Gillespie, Boczkowski, and Foot 2013 in Cotter 2019, 5). In the context of content consumption on TikTok, an algorithm is used by the FYP to calculate a user's chance of engagement with a video and will therefore show consumers the videos they are most likely to watch. Algorithms do not offer a technological tabula rasa but rather are programmed with and learn social biases (Just and Latzer 2017 in Cotter 2019, 6). In addition to being coded with the social biases that programmers have, the purpose of algorithms on platforms like TikTok is to learn what is popular through AI without having the capability to make ethical or moral judgements on the content. Therefore, social discrimination and biases are learned by algorithms as they perpetuate normative social ideals such as beauty standards, racial bias, or ableism.

Algorithms are created and maintained by their platforms and often work hand in hand with human teams to address and perform the same functions. The capabilities that a platform offers to users, labeled in the column of the table below as platform interpretations, presents users with the various services platforms offer. In the context of this research, TikTok provides three resources: content curation through the FYP; affordances such as editing, messaging, and other features; and content moderation, exemplified by that which is either removed from the platform based on its community guidelines or shadowbanned. Algorithms are either programmed or learn through artificial intelligence to execute these functions through the concepts of algorithmic visibility, a user's algorithmic literacy, and algorithmic exclusion exclusion.

Algorithmic Influence	Platform Interpretations
Algorithmic Exclusion	Content Moderation
Algorithmic Literacy	Affordances
Algorithmic Visibility	Content Curation

Table 1: The Overlap in Algorithm-Platform Function

Before algorithms dominated the interactions we have on social media, users knew who their audience was, how they could reach them, and what they wanted to see and/or hear. With the introduction of algorithms in the communicative process on social media, a new actor emerges in social networking that users must consider. Algorithms mediating these interactions obscure the ideas of who users are communicating with, what they can, should, or cannot say, and how they get in front of their desired audience. These aspects require users to first understand, communicate with, and, in some instances, overcome the algorithm before achieving their content creation goals. This section will offer an overview of the various and interdependent aspects of algorithmic influence and platform interpretations in relation to how they affect user communicative behavior and decision-making in content creation.

# Moderation and Algorithmic Exclusion

Although it is impossible to state whether or not the semantic decision-making process begins as such, one cannot understate the influence of what can and should not be said in communicative behavior. Content moderation is a platform function and responsibility that includes "the process in which platforms shape information exchange and user activity through deciding and filtering what is appropriate according to policies, legal requirements and cultural norms." (Zeng and Kaye 2022, 81). On TikTok, this occurs either through direct content moderation or implicit shadowbanning. For direct content moderation, the platform can decide to either remove a TikTok it deems inappropriate or ban a user from the platform permanently. Shadowbanning serves as a myth on many social media and specifically on TikTok; its perceived existence nonetheless can influence the real communicative behaviors of users. Shadowbanning encompasses the algorithmic suppression of content or an account, leading to artificially decreased visibility and engagement, without formal notification of a violation.

In the beginning of digital communications, content moderation was frequently performed by volunteer human teams, known as moderators. As social networking has grown, and the amount of content needing to be moderated with it, platforms have not only begun formally employing their moderators but have also included AI-informed algorithmic content moderation to their moderation toolkits. These algorithms are trained to use supervised classifications to predict outcomes through pattern recognition (Gorwa, Binns, and Katzenbach 2020, 5). Relying on socially-informed predictions, AI content moderation can lead to bias both based on human-input or through machine learning. (Binns et. al. 2017). This bias in turn manifests into the translation of sociocultural stigma onto platforms that use AI content moderation, "can become embedded – or coded – into platforms' algorithmic and public-facing methods of control." (Gerrard and Thornham, 2020, 1271). Researchers have pointed out the effects that content moderation, especially biased, can have on public discourse, stating that "Norms of acceptability do not exist in a vacuum, as they are reinforced by prior standards, and they are also malleable." (Binns et. al. 2017, 406). Algorithmic content moderation presents an imperfect solution to

the threat of inappropriate content on social media, often erring on the side of caution at the expense of minority groups.

Algorithmic content moderation is directly related to the notion of algorithmic exclusion, defined as, "the ways in which algorithms construct and reconstruct exclusionary structures within a bounded sociotechnical system, or more broadly across societal structures" (Simpson and Semaan 2021, 252:24). Algorithmic exclusion differentiates itself from algorithmic content moderation in that it encapsulates the collective lack of visibility for various types of content as a technosocial outcome of the platform's content moderation policies. Algorithmic exclusion has the possibility to manifest as marginalization, as these calculations, "statistical accuracy often lays the burden of error on underserved, disenfranchised, and minority groups. The margin of error typically lands on the marginal: who these tools over-identify, or fail to protect, is rarely random (Buolamwini and Gebru, 2018)" (Gillespie 2020, 3). The concepts of algorithmic exclusion and content moderation are directly related to this article's research questions as they inform what lesbian content creators on TikTok consider to be discouraged or unallowed on the platform.

# Affordances and Algorithmic Literacy

Adopted from design theory and used within the context of social media studies, affordances denote the perceived possible actions associated with a feature on a platform (Bucher and Helmond 2018, 3). One example on TikTok could be the captioning functionality; while a user describing their cat's behavior could see this feature as a way to increase accessibility and visibility for their content, another user discussing potentially unallowable topics might perceive the captioning feature as a way to evade moderation or provide context. Affordances are not only dependent on individual users but are also socially-informed through environmental cues and interaction (Gaver 1996, 3.). Therefore, different platforms can lead the same user to perceive different affordances from the same feature based on their experiences on the platform and what they perceive other users doing.

Whereas some scholars consider algorithms to be a type of "hidden affordance", this research emphasizes the concept of algorithmic literacy to encapsulate a user's understanding of specifically an algorithm's functionality, potential, and limitations. Algorithmic literacy can be influenced by a variety of factors, including but not limited to: sociocultural background, political ideology, identity, level of education, and amount of exposure to the platform. The concept of algorithmic literacy has been considered to be plagued by three hindrances, namely: lack of understanding of how algorithms operate; the opacity of algorithms; and differences in vocabulary to describe algorithmic interactions (Swart 2021, 2). Algorithmic literacy is relevant to understanding semantic decision making and the impact of algorithms on these decisions as, "users' understanding and perceptions of algorithms in social media platforms, the ways in which users imagine and expect certain algorithmic affordances, affect how they approach these platforms." (Bucher and Helmond 2018, 14). The affordances that a user perceives and their level of algorithmic literacy are directly related to what they believe is possible on a social media platform and how an algorithm can improve or hinder their goals.

# Content Curation and Algorithmic Visibility

Within the context of TikTok, content curation is synonymous with the platform's various modes of consumption, the most popular of which being the FYP. According to Chen and Shi, TikTok videos have four levels: content source, content review, content push, and user interaction. Their investigation of the content push or curation phase identifies three methods. Through user-based collaborative filtering, the FYP algorithm matches the interests of similar users to recommend content. The second method, known as precise recommendation, suggests content based on their social contacts either within the platform or through their phone's contact list, thereby creating a socially-informed curation method. The final method is overlay recommendation, whereby a TikTok is evaluated by the FYP algorithm at various points of recommendation to gauge the viral potential of the video (Chen and Shi 2022). The algorithm that drives content curation on TikTok has been observed, as any algorithm, to "achieve efficient connection between users and information" (Chen and Shi 2022, 13). Content curation therefore describes the platform's algorithmically-driven process of suggesting content for users to consume, which, since the advent of such high-performing algorithms, have created a new dynamic in social media consumption. As opposed to the past, where users had to select the accounts and content that they wished to see based on their interests, algorithms now make these decisions on behalf of users and the interests of their platforms.

Algorithmic visibility, on the other hand, denotes a content creator's success in landing on the FYP. Frequently the core motivation for creating TikToks, algorithmic visibility has the potential to influence semantic decision-making for lesbians on the platform. Research on user assumptions of the TikTok algorithm found and confirmed that video engagement, in the form of likes, shares, etc, influenced algorithmic visibility. Furthermore, users assumed and quantitative analysis confirmed that the time of day a TikTok was posted increased algorithmic visibility. Research was able to disprove, however, the commonly held myth that sporadic hashtagging, such as #fyp, would lead to increased algorithmic visibility (Klug, Qin, Evans, Kaufman 2021). TikTok users therefore have expectations and misunderstandings of how the algorithm influences their visibility on the platform and must actively consider its calculations in their content creation processes. If algorithmically-driven platforms like TikTok decide what types of content users consume, then content creators must understand how algorithms build their audiences, which can in turn affect their creative process and decision-making.

In addition to the normative effect this has on content creators, algorithmic visibility and content curation also influence consumers, described by some as "the social costs of recommendation systems, particularly if we think about the performative elements of the search algorithms in terms of shaping normativity" (Gerrard and Thornham, 2020, 1266). Although many people's intention, visibility is not every content creator's goal; especially when considering marginalized populations such as lesbians, general algorithmic visibility could present a threat to content creators. Beyond receiving homophobic interactions from the general public, lesbians whose TikToks achieve algorithmic visibility might unintentionally have their sexuality be disclosed to people in their analog social circle by the platform. The power that platforms and algorithms hold through content curation and visibility are a tremendous source of influence over individual users and the collective communities that operate within them.

# Algorithmic Bargaining

Algorithms not only control what is allowed on platforms like TikTok through algorithmic exclusion, but also what is prioritized for visibility. Unfortunately, although vital to the operation of these platforms, algorithms are nonetheless opaque and mysterious figures that users often misunderstand, as evidenced through various levels of algorithmic literacy. Given these constraints, users must reckon with the algorithm in achieving their content creation goals. The focus of this research introduces the concept of algorithmic bargaining, whereby content creators alter their output to achieve a specific outcome from the algorithm. To do this, content creators address the algorithm in their aesthetic approach, language choices, or other features that they otherwise would not have done if publishing to their desired audience directly. An example of algorithmic bargaining in the context of this research is the use of the morph le\$bean within the lesbian TikTok community. A wide variety of factors contribute to the extent of this behavior, including: demographics, intent behind content creation, individual algorithmic literacy, and any experiences with or perceptions of algorithmic exclusion and visibility.

Previous research has confirmed the existence of algorithmic bargaining in the content creator community, finding that algorithms discipline their users to, "normalize their behavior or risk becoming invisible" (Bucher 2012, 1172. In Cotter 2019, 7). Content creators normalize their behavior through testing the limits of the algorithm and monitoring their contents' performance in line with specific actions in their content through informal A/B testing and also learn the explicit rules of the platform by reading their community guidelines. This process of learning is described by Devito in her study of transfeminine experiences on TikTok as "an actionable folk theory, one which the user can use to evaluate different algorithmic doors to visibility and try new strategies" (2022, 380:16). In light of the lack of transparency in algorithmic outcomes, personal experiences and preferences arise in the creative process, leading content creators to employ different strategies in their algorithmic bargaining (Cotter 2019). Algorithmic bargaining therefore represents a tool for content creators to level the playing field with the algorithms that stand between their output and audiences, balancing the power dynamics between user, platform, and algorithm. Karizat and colleagues apply the theory of algorithmic resistance to the TikTok context as a form of "repair politics' in its efforts to correct (and repair) perceived representational problems in the algorithm's outputs by working within an algorithm's framework to influence and shape its outputs" (2021, 305:22). Algorithmic bargaining therefore represents a specific form of algorithmic resistance whereby users negotiate their self-expression to appear the algorithm to achieve their content creation goals.

This power dynamic between user, platform, and algorithm has traditionally been understood in a static and hierarchical manner; the conceptual framework of this research, however, understands the relationship to be dynamic, cyclical, and multifaceted. As represented in the diagram below, the influences and interpretations that platforms and their algorithms operationalize are interconnected. Furthermore, users, platforms, and algorithms learn from and inform the actions of one another continuously. Whereas platform influence and algorithmic calculations have been demonstrated in previous literature, this research highlights user agency through algorithmic bargaining to attempt desired outcomes in their content creation.

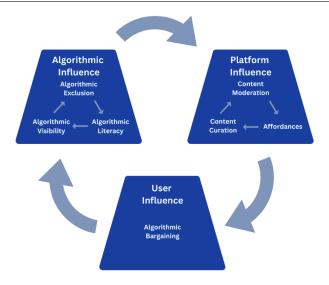


Diagram 1: Author's Representation of Power Dynamic between User, Platform, and Algorithm

# 4. Methodology

This research is concerned with the negotiation and self-disclosure of sexual identity in algorithmically-mediated social media networks. TikTok was selected as the field of inquiry given the broad range of content, the richness of the data, and its publically accessible nature. Furthermore, the lesbian subculture on TikTok was chosen as a target demographic due its demonstrated use of obfuscated language, their explicit allowability on the platform, and relatively high level of social acceptance in the U.S. (Poushter and Kent, "The Global Divide on Homosexuality Persists"). Both data from interviews (n=12) with relevant content creators and nonparticipant observation (n=2,159) of related TikToks were collected to conduct critical discourse analysis. Participants in this research were recruited through three channels: searching lesbian-centric keywords on TikTok (such as WLW, lesbian, le\$bean, LGBTQ), snowball sampling, and by viewing compilations of lesbian-focused TikToks on YouTube (Maxwell 2013, 142.). Purposeful sampling was also conducted to ensure diverse demographic perspectives, with particular attention given to age, ethnicity, content creators with small followings, and gender nonconforming lesbians (Maxwell 2013, 142.). Participants were required to meet the following eligibility criteria: be 18 years of age or older, make TikToks in the United States, identify as lesbian, and make TikToks addressing their sexual orientation.

After consent was obtained from eligible and willing participants, the researcher began the nonparticipant observation of the content creator's TikToks. This observation focused only on TikToks wherein the content creator's sexual orientation was either implicitly or explicitly addressed and took special precautions to exclude any TikToks including minors. The researcher cataloged her observations on a spreadsheet, including the date of publication, notes about the videos content and editing, and any mentioning of the obfuscated word le\$bean verbally, in the captions, or as a hashtag as a case study. These observations served to contextualize the semi-structured interviews between the researcher and participants. During the interviews,

participants were asked a range of questions pertaining to their experiences as a lesbian content creator on TikTok, with special emphasis placed on content curation, moderation, and creation. Participants disclosed not only their experiences as a consumer and creator on the platform, but also their theories as to how the algorithm mediates and interferes with user experiences on TikTok.

Transcripts of the interviews were uploaded into MAXQDA to conduct multiple rounds of grounded theory coding. Grounded theory allows for the data to reveal a unique analytical framework and eliminates biases from both the researcher and preexisting frameworks. Critical discourse analysis is an appropriate methodology for this article's research questions as it, "implicitly legitimizes or delegitimizes the actions of participants, since representational choices can connote broader associations of ideas, values and motives." (Machin and Mayr 2012, 103). The dual sampling methodology of interviews and observations allows not only for the interpretation of user experiences from their perspectives but also the documentation of their actual practices in an algorithmically-mediated environment. Despite this strong methodological approach, it is important to note that the results of this study were limited to publicly available content and its creators. Any deleted accounts, private, or removed content were not accessible for consideration in this research.

#### 5. Results

# Lesbian Communication and Semantic Decision-Making on TikTok

Informed through both nonparticipant observation and critical discourse analysis of interviews with lesbian content creators, it can be generally stated that this population uses both humor and storytelling when their TikToks address their sexual orientation. Lesbian content creators also used various vocabulary to describe their sexual orientation, including but not limited to: gay, wlw (short for women loving women), lesbian, sapphic, queer, and le\$bean. Two distinct decision-making processes were identified in these semantic choices; subconscious and conscious. Subconsciously, participants were affected by analog influences such as their identity formation process, political ideology, and reception within the lesbian community. Consciously, participants considered the platform's limitations, capabilities, and their goals in creating TikToks. Furthermore, they disclosed fears and barriers they believed they faced in reaching these goals. More detail, context, and consideration will be given to each of these factors in the following paragraphs.

Previous studies have confirmed the importance of a continuity of identity between digital and analog spheres, meaning that users intend to provide a mostly truthful representation of themselves on social media platforms (Darr and Doss 2022). Following this logic, one's analog identity and the social processes under which they came to be play an important role in the semantic decision-making and communicative behaviors of lesbians on TikTok. These influences are directly related to both whether a participant is out in their private life, and subsequently which specific terms they use to describe their sexual orientation. It is important to note that coming out is not a singular event or even a prerequisite to being a member of the LGBTQ+community; some choose to never share this part of themselves, whereas others do not reveal this personal information in certain spheres. Given the public facing nature of TikTok, and the algorithmic visibility that it generates, if a user discloses their sexual orientation in a TikTok, they risk being outed by the algorithm and losing their discretion and agency in the coming

out process. Participants that had not disclosed their sexual orientation to individuals in their private, analog social circles worried about being algorithmically outed. One shared that, "it wasn't really a consideration of 'Oh, am I ready for TikTok to know that I'm gay?' It was kind of the other way around of, 'Am I ready for the people who know me in real life to know that I have this TikTok where I'm extremely out and open about my sexuality?" (Interview with Participant 9, October 10, 2022). These issues surface when considering how to address sexual orientation on TikTok. This concern then boiled over into receiving negative outcomes in their private lives because someone discovered their sexual orientation through TikTok- would they not receive job offers because their potential employers found their presence online?

Participants shared that by disclosing their sexual orientation on TikTok, they were able to find community through humor and shared experiences. Some participants, however, faced barriers to entering this community based on: sexual history, gender identity, sex assignment at birth, anatomy, and other points of imposed differentiation. The existence of, acceptance within, or rejection from the lesbian community can therefore be determined as factors in the semantic decision-making and communicative behavior of lesbians on TikTok. Critical discourse analysis further revealed that there was a large divide and debate around both who is considered a lesbian and what words lesbians should use. Whereas generally younger participants felt that alternative terms such as "queer" were cooler and more accepting of various types of lesbians, older participants shared negative associations with the word "queer" in childhood bullying experiences and therefore clung steadfast to the term lesbian. Participants that lived in rural and conservative parts of the country noted that they faced harassment and had fears based on their sexual orientation; overall, however, lesbianism is increasingly accepted in the U.S. The political environment within which content creators are socialized and situated play a role in how they disclose their sexual orientation online.

On the conscious level, participants' experiences with and understanding of TikTok as a platform also influenced their semantic decision-making and communicative behavior. After using the app for a while, participants became entrenched in TikTok's visibility norms through content consumption, meaning they saw what was permissible, possible, and popular. In addition to the topics and delivery that fit these categories, aesthetic, stylistic, and editing considerations also needed to be made. As an example, one participant disclosed they believed their TikToks with #lesbian received comparatively less engagement and therefore chose to use other hashtags (Interview with Participant 2, October 12, 2022). Many participants shared that visibility and engagement norms reflect social trends and therefore perpetuate the marginalization of underrepresented and socially disadvantaged groups.

Participants praised the perceived anonymity that uploading sensitive content to TikTok provided; given that one's video could be seen by anywhere from one to one billion people, one could expect to hide among the masses. Participants also discuss the line between authenticity, intimacy, and privacy. They often felt the need to control the narrative with their audiences to foster the right amount of interest and connection without making themselves vulnerable to harassment. Whereas one might share a humorous anecdote or tell a light-hearted story related to their sexual orientation, they would not share more critical thoughts, such as questioning their sexuality, to avoid backlash. This renders content creators as feeling the need to remain superficial to protect themselves from criticism or worse. Throughout the interviews, participants shared the affordances they perceived on TikTok in terms of how to use the platform, content creation, and interactivity between users that influenced their word choices.

Largely, the way lesbian TikTok creators address their sexual orientation is related to what they are trying to achieve and what barriers they believe stand in their way. Many disclosed that they were concerned for their physical safety by sharing this information publicly and that other content creators had received death threats. Lesbian content creators also considered how their TikToks affected their privacy, for example with doxxing, whereby their contact and personal information would be maliciously disclosed by a harasser. In addition to concerns about themselves, lesbian TikTok content creators also wondered if they were misrepresenting their community and if they used language that might cause offense, examples of such being found in sexually suggestive or gendered language. Participants asked themselves if the message they were sharing through their TikToks contributed to further lesbophobia through stereotypes and marginalization.

These concerns represent the fears that content creators have in terms of achieving their goals, which can be summarized into four categories. The first category is self-expression, whereby content creators are using the platform as a way to share their life and identity either with the larger public or with themselves through the performance and creation of TikToks. Additionally, participants shared that they intended for their TikToks to help them represent and find the lesbian community. One participant, for example, demonstrated this behavior in sharing her thoughts on straight women frequenting lesbian and gay bars (Interview with Participant 10, September 29, 2022). This discourse allowed her to share with others how heteronormativity limits the number of spaces where people in the LGBTQ+ community can safely approach potential dates, and by entering these spaces, straight women interfere with this environment. Creating TikToks about their sexual orientation also allowed participants to participate in subculture by adapting trends to their content niche. For example, content creators can adapt aural memes to a topic of their choosing. The final goal identified in TikTok content creation amongst participants was income generation; half of this research's participants either made money directly through TikTok's creator fund, brand sponsorships, or promoting their own small businesses. This represents a powerful motivation and high risk for the successful creation of engaging content. As demonstrated through the above findings, lesbians on TikTok use a variety of vocabulary and tools to address their sexual orientation. These outcomes are influenced by analog and digital experiences and understandings that create unique communicative behaviors. These behaviors are further informed by the goals and fears that content creators have; one goal, however, stands above the rest, namely, visibility.

# Algorithmic Influence on Lesbian Communication and Semantic Decision-Making on TikTok

Unless content creators are using the platform as a simple creative outlet without posting to the FYP, algorithmic visibility remains the main intention behind any of the goals listed above. In order to express oneself, find and represent their community, participate in trends, and generate income, their TikTok videos must be seen by others. As mentioned in the introduction, TikTok decides who sees which videos through the algorithmically-mediated FYP. In addition to managing what is seen, TikTok also uses algorithms and AI to decide what will not be seen, referred to in the conceptual framework of this paper as algorithmic exclusion. As gatekeepers to content creator's goals, algorithmic outcomes and the anticipation thereof influence lesbian semantic decision-making and communicative behavior on TikTok.

Participants considered algorithmic visibility and how the algorithm would favor their content in many ways. Beyond the aesthetics, sounds, and length of their TikToks, lesbian content creators paid attention to the various language inputs on the platform, including their speech, captions, hashtags, and the inclusion of text within a TikTok. Nonparticipant observation revealed insights into a peculiar utterance used on the platform, le\$bean. This morph represents "an alternate form of a preexisting, original word or phrase that looks similar to the original", in this example, the "s" in the word lesbian is replaced with a dollar sign (\$) and the "-bian" suffix is replaced with "-bean" (Chen, Zhang, and Wilson 2013, 8). Out of 2,159 observations, le\$bean and its derivatives were used 8 times verbally, 42 times as in-video text or captions, and 162 times as a hashtag. Therefore, the morph le\$bean was used in 9% of nonparticipant observations of this research. Not only did participants believe that using the morph le\$bean would evade content moderation, but also found that it provided a humorous and trending term to show affiliation with the lesbian community. This utterance represents a concrete example of the extent to which the anticipation of algorithmic outcomes influences communicative behavior on TikTok.

Naturally, a participant's algorithmic literacy directly influenced their perception of algorithmic visibility and how this intervened in their content creation goals. Some participants shared that the algorithm favored frequent posting, leading them to prioritize the quantity and timing of their uploads as opposed to the content and quality. Diverse theories around hashtagging also emerged, with some participants believing hashtags needed to be related to the topic of their content and others believing they needed to be addressed to their target audience. Another point of division was the idea of a content niche; many content creators, especially those interested in income generation, believed that the algorithm favored consistency in their content; if the algorithm could recognize that they were a lesbian content creator, as opposed to a content creator who happens to be lesbian, this would facilitate visibility. Overwhelmingly, participants had diverse understandings of what the algorithm was, how it worked, and its impact on their visibility and platform experience. As previously stated, algorithms are opaque calculations; these differences in algorithmic literacy are therefore not surprising. Whatever may be, it can be said that a user's algorithmic literacy, a form of anticipating algorithmic outcomes, influences semantic decision-making and communicative behavior for lesbian content creators on TikTok.

Many shared that the algorithm creates interest-based bubbles that groups like-minded users to share similar content. For the lesbian community, this meant that the algorithm created a mostly safe space to disclose and discuss sexual orientation. One participant stated that, "I think that the algorithm just protects me more and sends my videos to people that actually want to see it that aren't like, commenting, 'ew, lesbians'" (Interview with Participant 1, October 5, 2022). Despite believing that their audience would appreciate their content concerning their sexual orientation, participants were still concerned about the algorithm's interpretation of such TikToks. Whereas some participants hoped to achieve general algorithmic visibility, meaning that their TikToks would be seen by as many users as possible, others only wanted to be seen by their target audience. Participants would alter their speech and even create TikToks directed at the algorithm to steer them towards their target audience, further demonstrating how algorithmic visibility impacts their behavior on TikTok.

Given that content moderation is partially performed through AI and algorithmic calculations on TikTok, participants considered moderation in their semantic decision-making and communicative behavior. Content moderation on any social media platform can occur explicitly through the removal of content or account, or implicitly through shadowbanning and

algorithmic exclusion. Participants in this research had experienced either first or second hand both types of content moderation and often felt confused about the outcomes. This leads to myths and folklore surrounding content moderation and makes it difficult for content creators to understand what is allowed and favored on TikTok. One of these debates is concerned with the existence of shadowbanning; whereas some participants believed they were being algorithmically suppressed for creating content about their sexual orientation, others felt that shadowbanning did not exist and simply represented poorly performing content. Participants agreed that more politically driven content received increased scrutiny, leading one to avoid sensitive topics altogether, sharing that they didn't receive moderation, "...because I'm not really talking about anything real. If you really think about it, I'm playing a caricature of some facet of this culture, I'm not actually bringing forth anything that's meaningful, or there's no real discourse that I'm provoking from the content that I create" (Interview with Participant 2, October 12, 2022). This statement reveals that in light of non-transparent algorithmic content moderation, participants avoided contentious discourse.

Special consideration was given to the word lesbian and content surrounding sexual orientation in the interviews with participants. Some believed that the word was moderated or shadowbanned and therefore they avoided its use. Furthermore, participants weren't always critical of this type of moderation; some believed it was inherited from the Chinese coding and business environment where TikTok originated, others felt it might protect children from inappropriate material, and others maintained that moderation of the word lesbian was intended as combatting potential harassment. Both in the context of their sexual orientation and the word lesbian specifically, participants employed strategies to evade content moderation. These included the use of morphs, such as le\$bean or reuploading content using alternative vocabulary or editing their communicative behaviors. These tactics can be described as algorithmic bargaining as they are directed at the algorithm to achieve either visibility or evade moderation. Algorithmic bargaining encapsulates the extent to which lesbian content creators are influenced by algorithmic outcomes in their semantic decision-making and communicative behaviors.

# 6. Discussion

These results indicate two overarching trends that have emerged as a result of TikTok's algorithmically-mediated social environment. The first is that marginalization not only is reflected in the digital sphere but also perpetuated and reinforced through AI-informed algorithms. As previously mentioned, algorithms on platforms like TikTok serve as decisionmakers for both visibility and content moderation (Gerrard and Thornham 2020; Simpson and Semaan 2021). These systems are both inherently opaque given their proprietary nature and constantly evolving due to AI machine-learning processes, leaving content creators confused as to how the algorithm will interpret their output (Grandinetti 2023). This ambiguity requires that content creators make their best educated guess and essentially bargain with the algorithm in their communicative behavior to achieve their desired outcome. Rumors of shadowbanning minority groups, platform social norms, and analog influences lead marginalized communities, such as lesbians, to engage in shallow forms of self-expression, characterized by humor and storytelling. For an individual content creator, engaging in algorithmic bargaining allows for easier attainment of content creation goals. As one participant noted in relation to using the morph le\$bean, "If I use this word, I understand that it's frustrating, I understand that this word stigmatized, I understand that it's not helping the community, but like, me as a singular

lesbian, like, my priority is like, this is my business and like, I need to pay my bills" (Interview with Participant 1, October 5, 2022). This sentiment embodies the problem that, as a collective, algorithmic bargaining leads to the normalization of homophobia in algorithmically-mediated environments.

Social media platforms and the algorithms that run them represent a form of normalized power. Foucault described this as, "first a practice is forced on you, but if you repeat it enough times it becomes a habit, and eventually a habit becomes a desire. At this point, one ceases to see the practice one desires as an effect of power" (Taylor 2017, 22). Normalized power varies from traditional forms of power as it embodies an internalized form of influence that is socially exercised between peers as opposed to a top-down commandment. The normalization of shallow forms of self-expression is further expanded through the influences of algorithmic visibility and content moderation. Algorithms therefore serve as a catalyst for the perpetuation of social marginalization in the digital sphere. This cycle can be observed in the depiction below:

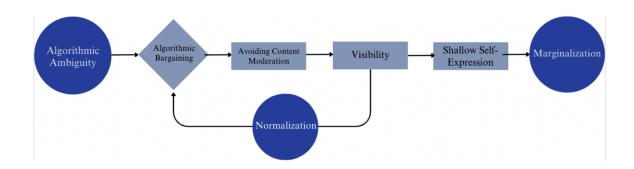


Diagram 2: Author's Representation of Cycle of Algorithmic Bargaining, Normalization, and Marginalization

Previous research has given attention to algorithm's learning of and role in perpetuating heteronormativity. Algorithmic heteronormativity describes, "digital infrastructures, features, and affordances that encourage heteronormative sexual behaviors and devalue queer sexual behaviors and expressions" (Parry, Filice, and Johnson 2023, 3). Heteronormative sexual behaviors not only include a general social preference for heterosexual relationships but also the encouragement of heterosexual norms within queer relationships: sexual reproductivism, monogamy, and sexual shame. An interesting debate emerges in this context as to whether lesbian algorithmic bargaining acts as a form of resistance against algorithmic heteronormativity or if it allows for the continuation of such marginalization.

The second trend that has emerged through this research is the shifting or balancing of power dynamics between user, platform, and algorithm. Central to this shift is both a recognition of user agency and the realization that algorithmic outcomes are constantly evolving thanks to AI. The dynamic nature of AI-informed algorithms not only causes confusion for users, but also

for the platforms that house them. As one TikTok employee divulged to a participant of this research, "Even the people who work at TikTok don't really know how TikTok works" (Interview with Participant 2, October 12, 2022). This alludes to the issue that user-facing employees often do not have the technical experience to explain how the algorithm influences their experience and that, as an "intelligent" mechanism, the algorithm learns beyond what it was programmed to do. Previous conceptualizations of these relationships were hierarchical and placed users in a secondary role, simply receiving visibility, moderation, and functionality as bestowed upon them by the algorithm and/or the platform. The concept of algorithmic bargaining grants agency to users and offers a tool for users to overcome algorithmic adversity. By altering their communicative behaviors through algorithmic bargaining, users are, in a sense, communicating directly with the algorithm, influencing it to make a determination that the user believes it otherwise would not. In addition to obfuscating their language, users are also able to perform other mitigation tactics should the algorithm pose a barrier to reaching their content creation goals. When subject to content moderation, for example, users are able to both appeal the moderation decision or reupload their content with adjustments based on what they believe triggered the moderation.

As previously indicated, one of the factors that influences a user's understanding of and bargaining with the algorithm is their respective algorithmic literacy. Algorithmic literacy can be understood to reveal a level of competency in an environment like TikTok. who choose to bargain with it accept that differentiation and marginalization occur on the platform. As Bourdieu wrote, "The specific uses of language owe their specifically social value to the fact that they tend to be organized in systems of differences... which reproduce, in the symbolic order of differential deviations, the system of social differences." (Bourdieu 1992, 54). Additionally, algorithmic visibility serves as a currency or reward for those that play by the algorithm's "rules". Some scholars believe this achievement has an impact on the analog world, theorizing that visibility, "reinforces offline hierarchies of social privilege with 'winners' being those with greater access to social, cultural, political, and economic resources... their influence on social media culture—and culture more generally as it bleeds into 'real' life—may perpetuate existing hegemonic ideologies and values." (Cotter 2019, 26). The ability to contend with an algorithm as a demonstration of algorithmic literacy therefore represents an advantage that some content creators hold over others. Although these findings are specific to the timeframe, population, and platform within which they were analyzed, they nonetheless shed light on implications beyond the scope of this research. The first conclusion that can be drawn is the evolution of self-identification and self-disclosure for the LGBTQ+ community and how these processes are impacted by social media. Especially for youth, who have been partially socialized in these environments, what is perceived as socially normal and acceptable in algorithmically-mediated social media could affect their conceptualizations of identity and specifically sexual orientation. Research has shown that algorithmic visibility and content moderation train users to, "remain below the radar by avoiding lengthy, loud political debates and engaging in sensationalist behavior" (Vijay and Gekker 2021, 725). This theory emphasizes the power of algorithmic visibility and bargaining and how forms of social marginalization, for example heteronormativity, are learned and perpetuated online and potentially internalized to the analog sphere. These issues underscore the need for increased algorithmic transparency so that users are able to make informed decisions about their content creation and consumption behaviors.

#### 7. Conclusion

This research, at a basic level, has highlighted the influence of AI-informed algorithms on communicative behaviors. Through a case study of the lesbian community on TikTok, it discovered that lesbians often use humor and light-hearted storytelling to address their sexual orientation on the platform. They consider the goal of their content, the platform and its algorithm, and are influenced by analog experiences in making these semantic decisions. As algorithms mediate communication between users, users must understand how algorithms work and what their effect on their output is to achieve their goals in content creation. As proprietary formulas, algorithms are inherently opaque systems into which users will never have full transparency. Additionally, algorithms informed by AI are challenging to contend with given that they are constantly learning and therefore evolving. These characteristics not only create difficulty for users in understanding these systems, but also in how they need to behave to achieve their content creation goals. Thus, users modify their communicative behavior and alter their semantic decision-making to bargain with AI-informed algorithms. For the lesbian community on TikTok, this algorithmic bargaining manifests as obfuscating language, whether avoiding the word lesbian in favor of more "palatable" terms such as queer or using the morph le\$bean. Algorithmic bargaining represents a form of agency for TikTok users to achieve visibility and/or avoid moderation.

AI-informed algorithms continue to present an important field of study across many fields, including human-computer interaction, platform governance, and critical algorithm studies. Increasing political attention has been given to platforms' influence in the economy, political processes, and social relations (Abidin, 2021, Medina Serrano, Papakyriakopoulos, Hegelich, 2020, Schellewald 2021). Additionally, some governments have begun problematizing the lack of transparency in algorithms in relation to the power they hold over the aforementioned forces (Official Journal of the European Union, L 277, 19). This research contributes to this narrative by underscoring the social cost of opaque algorithms for socially marginalized communities. In an environment where users do not fully understand how algorithms operate, they must guess and bargain to achieve their content creation goals. This leads to a vicious cycle whereby the algorithm normalizes bargained behaviors through its learning mechanisms, leading more users to see shallow forms of self-expression. Overall, this contributes to the continued digital marginalization of minorities, such as lesbians, despite being outwardly accepted on the platform and increasingly welcoming in the analog world. Further research in this field could explore manifestations of digital marginalization for other populations and on other platforms. Research synergies with computer scientists to unearth the technical side of algorithmic marginalization and processes of normalization would also be welcome. As AI and algorithms increasingly mediate communication in casual, professional, and political settings, the effects of these technologies must also be recognized.

# References

Abidin, Crystal, and Bondy Valdovinos Kaye. 2021. "Audio Memes, Earworms, and Templatability: The 'Aural Turn' of Memes on TikTok." In *Critical Meme Reader*, edited by C. Arkenbout, J. Wilson, and D. De Zeeuw. Institute of Network Cultures.

- Bhandari, Aparajita, and Sara Bimo. 2020. "Tiktok and the 'Algorithmized Self': A New Model of Online Interaction." *AoIR Selected Papers of Internet Research*. https://doi.org/10.5210/spir.v2020i0.11172.
- Biddle, Sam, Paulo Victor Ribeiro, and Tatiana Dias. 2020. "TikTok Told Moderators: Suppress Posts by the 'Ugly' and Poor." The Intercept. https://theintercept.com/2020/03/16/tiktok-app-moderators-users-discrimination/.
- Binns, Reuben, Michael Veale, Max Van Kleek, and Nigel Shadbolt. 2017. "Like Trainer, like Bot? Inheritance of Bias in Algorithmic Content Moderation." Lecture Notes in Computer Science. https://doi.org/10.1007/978-3-319-67256-4-32
- Boffone, Trevor. 2022. Tiktok Cultures in the United States. London: Routledge, Taylor & Francis Group.
- Bourdieu, Pierre. 1992. Language and Symbolic Power. Edited by John Thompson. Polity.
- Bucher, Taina, and Anne Helmond. 2018. "The Affordances of Social Media Platforms." In *The SAGE Handbook of Social Media*. https://doi.org/10.4 135/9781473984066.
- Bucher, Taina. 2012. "Want to be on the Top? Algorithmic Power and the Threat of Invisibility on Facebook." New Media & Society 14:7: 1164–1180. https://doi.org/10.1177/1461444812440159.
- Buolamwini, Joy, and Timnit Gebru. 2018. "Gender shades: Intersectional accuracy disparities in commercial gender classification". Proceedings of Machine Learning Research 81: 1–15.
- Chen, Le, Chi Zhang, and Christo Wilson. 2013. "Tweeting Under Pressure: Analyzing Trending Topics and Evolving Word Choice on Sina Weibo." Paper presented at ACM Conference on Online Social Networks. https://doi.org/10.1145/2512938.2512940.
- Chen, Zhiling, and Chen Shi. 2022. "Analysis of Algorithm Recommendation Mechanism of TikTok." *International Journal of Education and Humanities* 4:1: 12–14. https://doi.org/10.54097/ijeh.v4i1.1152.
- Claresta, Henny, and Daniel Tamburian. 2021. "Self-Disclosure of Adolescent Girls on TikTok Social Media." In *Proceedings of the International Conference on Economics, Business, Social, and Humanities* (ICEBSH 2021). https://doi.org/10.2991/assehr.k.210805.126.
- Cotter, Kelley. 2019. "Playing the Visibility Game: How Digital Influencers and Algorithms Negotiate Influence on Instagram." New Media & Society 21:4: 895–913. https://doi.org/10.1177/1461444818815684.

- Darr, Christopher R., and Erin F. Doss. 2022. "The Fake One is the Real One: Finstas, Authenticity, and Context Collapse in Teen Friend Groups." *Journal of Computer-Mediated Communication* 27:4. https://doi.org/10.1093/jcmc/zmac009.
- DeVito, Michael Ann. 2022. "How Transfeminine TikTok Creators Navigate the Algorithmic Trap of Visibility Via Folk Theorization." *Proc. ACM Hum.-Comput. Interact.* 6, CSCW2, Article 380. https://doi.org/10.1145/3555105
- Fingas, Jon. 2020. "TikTok Will Stop Using China-Based Moderators to Screen Foreign Content." Engadget. https://www.engadget.com/2020-03-15-tiktok-to-stop-using-china-moderators-for-foreign-content.html.
- Hern, Alex. 2019. "TikTok's Local Moderation Guidelines Ban pro-LGBT Content." The Guardian. https://www.theguardian.com/technology/2019/sep/26/tiktoks-local-moderation-guidelines-ban-pro-lgbt-content.
- Hiebert, Alexa, and Kathy Kortes-Miller. 2021. "Finding Home in Online Community: Exploring Tiktok as a Support for Gender and Sexual Minority Youth throughout Covid-19." *Journal of LGBT Youth*: 1–18. https://doi.org/10.1080/19361653.2021.2009953.
- Gaver, William W. 1996. "Affordances for Interaction: The Social Is Material for Design." *Ecological Psychology* 8, no. 2: 111–29. https://doi.org/10.1207/s153 26969eco0802\_2.
- Gerrard, Ysabel, and Helen Thornham. 2020. "Content Moderation: Social Media's Sexist Assemblages." New Media & Society 22:7: 1266–86. https://doi.org/10.1177/1461444820912540.
- Gillespie, Tarleton. 2020. "Content Moderation, AI, and the Question of Scale." Big Data & Society 7:2: 1–5. https://doi.org/10.1177/2053951720943234.
- Gillespie, Tarleton, Pablo J. Boczkowski, and Kirsten A. Foot. 2013. "The Relevance of Algorithms." In *Media Technologies: Essays on Communication, Materiality, and Society* (MIT Press).
- Gorwa, Robert, Reuben Binns, and Christian Katzenbach. 2020. "Algorithmic Content Moderation: Technical and Political Challenges in the Automation of Platform Governance." Big Data & Society 7:1. https://doi.org/10.1177/2053951719897945.
- Grandinetti, J. 2023. "Examining embedded apparatuses of AI in Facebook and TikTok." AI & Soc 38: 1273–1286. https://doi.org/10.1007/s00146-021-01270-5.
- Just, Natascha, and Michael Latzer. 2017. "Governance by Algorithms." *Media, Culture & Society* 39:2: 238–258. https://doi.org/10.1177/0163443716643157.

- Kang, Hyunjin, and Chen Lou. 2022. "AI Agency Vs. Human Agency: Understanding Human-AI Interactions on Tiktok and Their Implications for User Engagement." Journal of Computer-Mediated Communication 27:5: 1–13. https://doi.org/10.1093/jcmc/zmac014.
- Karizat, Nadia, 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." *Proc. ACM Hum.-Comput. Interact.* 5, CSCW2, Article 305, https://doi.org/10.1145/3476046.
- Klug, Daniel, Yiluo Qin, Morgan Evans, and Geoff Kaufman. 2021. "Trick and Please. A Mixed-Method Study on User Assumptions about the TikTok Algorithm." 13th ACM Web Science Conference. https://doi.org/10.1145/3447535.3462512.
- Köver, Chris, and Markus Reuter. 2019. "Discrimination: TikTok Curbed Reach for People with Disabilities." netzpolitik.org. https://netzpolitik.org/2019/discrimination-tiktok-curbed-reach-for-people-with-disabilities/.
- Machin, David, and Andrea Mayr. 2012. How to Do Critical Discourse Analysis: a Multimodal Approach. Los Angeles, CA: SAGE Publications.
- Mackenzie, Sorcha Avalon, and David Nichols. 2020. "Finding 'Places to Be Bad' in Social Media: The Case of TikTok." In *Urban Australia and Post-Punk*. Palgrave Macmillan. https://doi.org/10.1007/978-981-32-9702-9\_22.
- Maxwell, Joseph A. 2013. *Qualitative Research Design An Interactive Approach*. 3rd ed. Thousand Oaks, CA: SAGE Publications.
- Medina Serrano, J. C., Papakyriakopoulos O., and Hegelich, S. 2020. "Dancing to the Partisan Beat: A First Analysis of Political Communication on TikTok." Paper presented at Southampton '20: 12th ACM Conference on Web Science. New York, NY, USA: ACM. https://arxiv.org/pdf/2004.05478.pdf.
- Mühlhoff, Rainer. 2020. "Human-aided Artificial Intelligence: Or, How to Run Large Computations in Human Brains? Toward a Media Sociology of Machine Learning." New Media & Society 22(10): 1868–1884. https://doi.org/10.1177/1461444819885334.
- Parry, Diana C., Eric Filice, and Corey W. Johnson. 2023. "Algorithmic Heteronormativity: Powers and Pleasures of Dating and Hook-up Apps." Sexualities. https://doi.org/10.1177/13634607221144626.
- Poushter, Jacob, and Nicholas Kent. 2020. "The Global Divide on Homosexuality Persists." Pew Research Center's Global Attitudes Project. https://www.pewresearch.org/global/2020/06/25/global-divide-on-homosexuality-persists/.
- Schellewald, Andreas. 2021. "Communicative Forms on TikTok: Perspectives From Digital Ethnography." *International Journal of Communication* 15: 1437–1457. https://ijoc.org/index.php/ijoc/article/view/16414/3389.

- Seaver, N. 2017. "Algorithms as Culture: Some Tactics for the Ethnography of Algorithmic Systems." Big Data & Society 4(2). https://doi.org/10.1177/2053951717738104.
- Seiffert-Brockmann, Jens, Trevor Diehl, and Leonhard Dobusch. 2018. "Memes as Games: The Evolution of a Digital Discourse Online." New Media & Society 20:8: 2862–2879. https://doi.org/10.1177/1461444817735334.
- Simpson, Ellen, and Bryan Semaan. 2021. "For You, or for 'You'?" *Proceedings* of the ACM on Human-Computer Interaction 4, no. CSCW3: 1–34. https://doi.org/10.1145/3432951.
- Smith, Ben. 2021. "How TikTok Reads Your Mind." The New York Times. https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html.
- Swart, Joëlle 2021. "Experiencing Algorithms: How Young People Understand, Feel About, and Engage With Algorithmic News Selection on Social Media." Social Media + Society 7(2). https://doi.org/10.1177/20563051211008828.
- Taylor, Chloë. 2017. The Routledge Guidebook to Foucault's The History of Sexuality. New York: Routledge. https://doi.org/10.4324/9781315727158.
- Vijay, Darsana, and Alex Gekker. 2021. "Playing Politics: How Sabarimala Played Out on TikTok." *American Behavioral Scientist* 65:5: 712–34. https://doi.org/10.1177/0002764221989769.
- Wang, Sean. 2018. "A Close Look into Tik Tok." Medium. https://medium.com/@seanzhiyangwangsk/a-look-into-tik-toks-success-6c12ebae572c.
- "What Is the 'for You' Feed?" 2022. TikTok Creator Portal. https://www.tiktok.c om/creators/creator-portal/en-us/how-tiktok-works/whats-the-for-you-page-and-how-do-i-get-there/.
- Zeng, Jing, and D. Bondy Valdovinos Kaye. 2022. "From Content Moderation to Visibility Moderation: A Case Study of Platform Governance on TikTok." *Policy & Internet* 14: 79–95. https://doi.org/10.1002/poi3.287.

#### Notes

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