Chapter 8
Tales of Visibility in TikTok: The Algorithmic Imaginary and Digital Skills in Young Users

Elisabetta Zurovac [ID]**, Giovanni Boccia Artieri** [ID]**, and Valeria Donato**

Introduction

Our lives are increasingly affected by algorithms that select information and regulate processes of interaction, providing us with a set of choices. As intermediaries in the distribution of information, they intervene in decisional processes and regulate access to several fundamental social spheres including work, education, or justice (O'Neil 2016) by providing users with relevant information that is required to participate in public life (Gillespie 2014). However, these mechanisms remain opaque to users. While they can encourage social connections (van Dijck 2013) and help us to orient ourselves in the complex enormity of information, they can also produce harmful or discriminatory results. For example, it has been shown that search algorithms can present biases that marginalize minorities, women and people with lower income (Noble 2018), thus contributing to the production and reproduction of stereotypes and discrimination. As algorithms play such a fundamental role on social media, where adolescents' digital skills are forged, there is consequently an urgency to investigate their experience when encountering algorithms.

E. Zurovac (✉) · G. Boccia Artieri · V. Donato
Department of Communication, Humanities and International Studies (DISCUI), University of Urbino Carlo Bo, Urbino, Italy
e-mail: elisabetta.zurovac@uniurb.it

Algorithmic Awareness and Practices on TikTok

Among the digital platforms that are most used by adolescents, contributing thus to their digital skills, TikTok is currently one of the most popular (Statista 2021). Moreover, its "engineered playfulness and performativity" (Savic and Albury 2019) is sustained by a highly intuitive set of video editing tools. Recent analyses carried out on TikTok (Bhandari and Bimo 2020; Francisco and Ruhela 2021; Krutrök 2021) show how this platform produces a model of sociability that is different from other social media-generated ones. TikTok is characterized by online interaction through an "algorithmized self": a type of public presentation oriented by a highly personalized algorithm (Francisco and Ruhela 2021) that is heavily informed by and directed towards the individual instead of an "audience" and thus guided by intrapersonal engagement rather than interpersonal engagement.

As Krutrök (2021) has argued, users develop socio-technological skills not through previously acquired digital skills related to algorithms, but from progressive exposure to the platform and to the practices they observe within it. In other words, users become aware of the existence of an algorithm, and by repeatedly observing and performing practices within that platform, they adapt themselves accordingly (Zulli and Zulli 2020). Observing repeated practices is so-called algorithmic gossiping (Bishop 2019), representing the way users spread and understand the logic of algorithms.

As noted by Karizat et al. (2021), the algorithmic awareness seems to be crucial to the user's experience within the TikTok: it allows the development of algorithmic folk theories (Eslami, et al. 2016) that lets users behave, engage and also resist the platform's structure. Folk theories are relevant within social media users due "*to the highly personalised, continuously changing, and relatively obscure nature of the algorithmically-driven systems for content curation and moderation*" (Chung 2020, p. 11).

However, a full understanding of the TikTok algorithm still does not allow users to avoid problematic contents (Harrigera et al. 2022) or escape from an already determined information literacy (Radovanović et al. 2015; Haider and Sundin 2021).

Taking into account this relevant literature, we focus our analysis on the algorithmic practices rather than the algorithmic knowledge as an appropriate and exhaustive understanding of how an algorithm works (in general) is not possible to obtain. What a user can do instead is imagine, learn by observing other users and try out tricks and/or practices demonstrating algorithmic awareness.

Building on the analysis of algorithmic practices (Boccia Artieri 2020) enacted on TikTok, this chapter aims to explore the relationship between the digital skills of adolescents and their algorithmic imaginary (Bucher 2017) as it is tied to the platform. Bearing this in mind, as will be illustrated in the following section, these practices depend on which "side of TikTok" a user is situated (Krutrök 2021). As the platform's algorithm pushes users into specific communities and niches, as Gillespie has indicated, the algorithm "shapes a public's sense of itself" (2014, p. 3) that represents the basis of their digital self-representation.

It is for this reason that qualitatively studying such performances of the self, embedded within a platform that is characterized by a sophisticated system of algorithmic recommendations (Vázquez-Herrero et al. 2020), also represents a way to understand how digital skills are employed in relation to the algorithmic imaginary.

A Carousel of Dreams and Nightmares: TikTok's FYP, Between Content Suggestion and Moderation

While other social media generate users' feeds through their social connections, TikTok can determine user preferences by gathering other personal information, such as location, gender and the device being used (Francisco and Ruhela 2021). As if that were not enough, TikTok is also able to identify small similarities between the most popular videos in order to construct a user profile to whom the platform will suggest content accordingly (Yu 2019; Smith 2021). So, while on other platforms the user feed is populated by content shared by a pre-existing network of followed accounts, TikTok's main page—the "for you" page (FYP)—is determined by its recommendation system. As a result, users are shown content based on previous preferences together with a carousel of possible choices for assessing future content on display (Klug et al. 2021). This carousel, according to TikTok (2020), is built on the main features of the app: it picks up content that uses the most popular sounds, effects and hashtags. The latter dimension needs to be addressed further. Though not as central as hashtags on other platforms from a user perspective (Yu 2019), textual information on TikTok is very valuable to the recommendation system as it uses hashtags and captions in order to evaluate content. The "LIVE page" of TikTok, which collects live streamed videos, is connected to the FYP as follows: while scrolling, users may encounter suggested LIVEs to interact with, and if a user decides to "enter" into it, TikTok opens a dedicated scrolling page. The LIVE shown on the FYP functions as a hook that is selected specifically for the user, while the other, specific "LIVE page" shows potentially all of the LIVE feeds being streamed at that moment. Creators that gain access to the LIVE function are those that have reached 1000 followers and are older than 16.

Although it appears particularly accurate in its recommendation and therefore its evaluation system (Smith 2021), the platform also raises several concerns. The lack of pre-existing social bonds and the use of a pseudonym allow users to express themselves more freely, within a space of semi-anonymity where the context collapse (Marwick and Boyd 2011) is often avoided. As a consequence, TikTok users are exposed to strangers and encouraged by the recommendation system towards their specific niche or subculture (Wall Street Journal 2021).

As Weimann and Masri (2020) note, the platform seems unable to enforce its guidelines and, most importantly, exposure to one problematic video potentially leads the algorithm logic to show further like content. This awareness should be at the basis of the defense mechanism used to "escape" from the bubbles in which users are placed.

Research Questions and Methodology

While the affordances of the platform seem to facilitate the diffusion and visibility of content, users still need to develop in-depth knowledge of TikTok's logic to benefit from it in terms of success and visibility. Users must similarly develop specific skills if they want to elude the platform's scrutiny—in terms of both content moderation and suggestions. Also, TikTok involves the users within one niche or another, framing the experience that occurs within the platform. In fact, it brings forth a highly localized and shared sociality structured in sub-communities that may not be accessible (nor visible) to non-members (Abidin 2021a). These dynamics are particularly relevant when thinking about young people, as they represent the vast majority of TikTok's audience and the most vulnerable public in terms of passively absorbing knowledge.

This leads to the research questions that this chapter aims to answer:

(RQ1) In which ways do young users employ or trick the algorithm on TikTok?
(RQ2) Do users employ digital skills while producing content on TikTok; if so, how?

In order to answer these questions, we adopt a qualitative methodological approach. Specifically, we consider digital ethnography (Hine 2015) to be the most efficient method to gain a longitudinal perspective aimed at understanding the complexity of the platform and the content (Schellewald 2021). The observation period lasted from July 2020 to November 2021, and each of the three researchers, located in different parts of Italy, used its personal account on a daily basis, for the extent of at least an hour, employing a spreadsheet as a diary and for data storage.

During this period, each researcher observed different practices and explored different sides of TikTok, participating in the platform as a user would do. In doing so, each researcher was able to develop a deep contextual understanding of the content. As noted by Schellewald (2021), the typologies of content users may encounter at the beginning of their experience are: comedic, documentary, communal (i.e., memes, trends), explanatory, interactive and meta. Due to the platforms' complexity and algorithmic sensitivity to one's preferences each researcher obtained different results within her/his FYP.

This approach led to the identification, as the so-called "pop-up moments" (Hine 2015), of three case studies, related to three specific elements occurring within TikTok: sound, hashtags and LIVEs. These cases were evaluated qualitatively, so as to answer RQ1. Specifically, understanding TikTok as a "meme breeding ground" (Martin 2019) while analysing content, we took into consideration the memetic dimensions suggested by Shifman (2013): content, form and stance. Each dimension was adjusted for the field and grounded in the knowledge developed within TikTok. To address RQ2, we draw from and build on the systematization of studies of digital skill domains presented by Haddon et al. (2020). Specifically, we evaluated, in each case, the presence of:

- Social interaction skills, defined as the capacity to understand the conventions of social communication

- Content creation skills, defined as the capacity to create suitable content and editing skills
- Ethical behaviour online, defined as the capacity to carefully explore content and/or engage with others

The data collected qualitatively refer to public videos produced by users declaring their age (13–19) within their self-description displayed on their profile.

"Sorry I Forgot TW!": Managing Boundaries and Self-Expression in #Traumatok

In March 2021, one of the researchers was consistently exposed to videos that narrate users' personal traumas, noting that almost every video presented the hashtag #Traumatok. Considering the hashtag as an instrument that can maximize visibility and define the field, the researcher moved to explore it more closely. The videos, whose duration varied from 15 s to 3 min, have been collected and analysed between March and November 2021.

This side of TikTok is populated by users who are united by the desire or the necessity to share traumatic experiences concerning abuse, childhood trauma, addiction, mental health and/or gender-related trauma.

Given the specificity of these topics and the age of the users involved, the main concerns revolve around (a) the risk of exposure to potentially harmful content; and (b) the risk of oversharing personal information.

As Weimann and Masri (2020) have demonstrated, TikTok does not always succeed in the complete removal of problematic content. In fact, the platform employs an accurate data mining system to apply the shadow ban, but users can dodge this mechanism by changing the spelling of triggering words. Using combinations of letters, symbols, emojis and numbers (e.g., "mol3\$t3d") is a common practice among the young population of Traumatok, when taking into consideration any of the textual parts of the content. Another such "precautions" related practice was identified in this context, albeit one which, differently, did not involve solely the algorithm.

Well aware of the potential visibility of content that could appear randomly in the FYP of unaware and unprepared individuals, users sometimes apply a warning signal in the form of letters "TW," that is, "trigger warning." In this way, responsibility for problematic content is delegated to the recommendation system (as it promotes videos for the FYP) and to the audience (immediately made aware by this warning). This tactic is an example of positive online behaviour intertwined with an awareness of unexpected users, and it demonstrates the development of a social norm. This codified disclaimer represented a marginal practice, however, despite the topics presented in the content (such as sexual assault or suicide). In one case, a creator writes in the comments "*SORRY I FORGOT A TW!! TW: joke about committing non-alive*"; this shows a desire to respect others' boundaries but also a carefree attitude when this norm is violated.

Apropos of boundaries, the other principal concern that can arise while exploring Traumatok is the management of personal information when narrating a traumatic experience. It should be noted that this context is intended as a "safe space" for the collective sharing of private traumas. Users feel free to express themselves: on the one hand, there is a community of individuals providing mutual support in the comments; on the other, since these communities are populated by strangers using pseudonyms, the tension caused by the "context collapse" experienced on other social media is relieved. That said, crossing the line of what should not be shared publicly is tricky to assess. Indeed, some information, if displayed, could potentially represent a privacy risk. Our analysis nevertheless reveals that these details are rarely given, and therefore that the young creators of Traumatok actively manage the boundaries of what is safe to share.

With regard to the video (self-)portrayal of the users, the vast majority adopts a curated image: even when talking directly about trauma, appearance has much relevance. This not only shows an awareness of "being in public" but also an acquired competence about the algorithm. In fact, as Melonio and colleagues (2020) have illustrated, for instance, TikTok has had issues with the "beauty stigma," as it seems to provide greater visibility to good-looking users. Indeed, appearance is so relevant on the platform that sometimes even the commenters point out the physical features of the creators, as well as mention the heart-wrenching topics of the videos.

The playful way of being on TikTok (Savic and Albury 2019) appears to dominate, encouraged in particular by the platform's memetic design (Zulli and Zulli 2020); this characteristic appears to affect even the more controversial niche of Traumatok. Our analysis reveals that most videos utilize lip-synching, popular sound effects and dark humour as coping mechanisms. For example, this is the case of a user that shows her face in blurred make-up after crying and uses as background sound some disturbing vocal messages that her ex sent her. While the audio goes on and the transcription of the messages appears on the screen, she mimics a dance following the words, as has been seen in any other performative TikTok content. Another user, for instance, employs audio called "step on the gas," which comes from a Playstation popular video game (Barradale 2021) but it is often used within #traumatok to present evidence of different kinds of abuse. In this specific example, while lip-syncing the word she writes on the screen about the fact that her mother forcing her into dieting made her develop a severe eating disorder. In this sense, "step on the gas" highlights in a "funny" way the tragic exaltation of her condition. In most cases, this creates an ad hoc performativity, but a minority of users also take part in more mainstream trends, reshaping the original meaning to make it coherent with the narrative costumes of this niche area. The adoption of sound and the aforementioned playful creativity, while talking about trauma, are elements that lead us to define this content as "commodified." That means videos are created to be relatable: they include no personal information, a generic description of a situation and correct use of the platform's editing tools. The success of this kind of content is attested by the comments, which typically just mention other users, recalling their attention towards something that is worthy of being seen.

Nevertheless, we should not over-simplify Traumatok as a demonstration of the desire to gain visibility through the spectacularization of pain. Rather, the platform

intertwines the dimension of "popularity" with the desire to be seen and heard, and therefore the need to reclaim one's power and one's voice in the narration of trauma and abuse.

Given this evidence, we may assert that users understood how to create effective content (content creation skills), also with regard to their appearance (social interaction skills) therefore taking into account the algorithmic imagery they have developed (in regard to that we refer specifically to the modified spelling of sensitive words). Moreover, when thinking about the use of "trigger warning," we can also deduce that some of the users present online ethical behaviour skills, as they prevent other users from being exposed to potentially disturbing content. At the same time, thinking about the performative aspects of the contents related to such themes may raise questions about self-exposure and spectacularization of trauma that may be problematic in terms of ethics.

Sounds Attractive: The Dynamics of Visibility in the Breonna Taylor Trend

In May 2020, the protests promoted by the Black Lives Matter movement pushed the spotlight onto another case of police brutality that happened in March 2020, concerning the murder of 26-year-old Breonna Taylor. Beyond mainstream media coverage, protesters used social media to sensitize, engage and cooperate through the hashtags #blacklivesmatter and #BLM, and the cause reached huge visibility and worldwide participation.

In July 2020 one of the researchers noted the repetition of numerous similar videos using the same song, titled "I Need You To" by the musician Tobe Nwigwe. The 44-second song, released on Instagram on 6 July 2020, spread through TikTok, confirming that it represents a new space for young users to distribute political content (Serrano et al. 2020). In the video accompanying the song, the call to action for the viewers is represented by the title and reinforced by the transcription of the lyrics "arrest the killers of Breonna Taylor."

Due to the prominence of this song, the researcher used the possibility given by the platform to search for content following this sound, from July to September 2020.

The majority of the analysed videos presented the same scheme: a kind of engaging or distracting introduction interrupted by a close-up of the user lip-synching to the verse "arrest the killers of Breonna Taylor," while this text appeared on the screen. The main techniques used to make the introduction include click-bate topics, which in turn are reaffirmed in the captions. Hashtags are not always attached to the video; if present, in the majority of cases, they do not relate to Breonna Taylor. In order to tease the audience, users mostly pretend to be sharing (1) gossip, (2) personal secrets or (3) life hacks.

While pleasing the curiosity of the audience serves as a hook for the watcher to stick around for enough time to gain visibility Smith 2021, the absence of revealing hashtags is a way to avoid being spotted and shadow-banned by the platform. This

absence of coherent textual indicators (hashtags and captions) invokes two different actors: the audience and the algorithm. On the one hand, it does not allow the audience to grasp the ulterior motive of the video and on the other, it prevents the algorithm from automatically pushing aside this content. In a few cases, the fear of being erased or intentionally blocked from emerging on the FYP is clearly expressed within text juxtaposed on the video or claimed in the caption (e.g., "watch it before TikTok takes it down"). These are extremely rare cases, though they demonstrate nonetheless that some users have at least a partial recognition of the depth of the platform's control. Indeed, after initially removing from the FYP videos dealing with protests (Harris 2020), TikTok (2020) backtracked, declaring that this was a mistake and that it would be corrected. With this in mind, it suggests that young users of the platform were not completely aware of this information, even if it was circulating publicly.

Exploring the phenomenon more deeply, the objective of gaining or providing visibility can be observed through the tactics used by the creators and by the audience.

In order to produce an effective video, users exhibit two main strategies suggested both by the affordances of the platform and by the algorithm: (1) a curated self-presentation, and (2) the correct use of filters. With the notion of a curated self-presentation, we refer to the overall appearance (i.e., the presence of make-up, a refined outfit and hairstyle) and the way in which an individual acts in front of the camera (e.g., self-confident, flirty). From this perspective, filters can of course be considered as a tool to enhance one's appearance, but, relevantly, they also represent an element that the algorithm evaluates positively. Here we can distinguish two predominant kinds of filters: those improving users' looks (white teeth, smooth skin) and those refining the content through visual effects (such as a green screen or a rain filter).

To consider the tactics employed by the audience, besides likes and sharing, we focused on the comment section. In fact, the knowledge that commenting would result in a better performance for the content, users explicitly wrote messages such as "commenting for the algorithm" or just "algorithm." This shows their interest in sustaining the message, by increasing the visibility of the video and exploiting their grasp of TikTok strategies.

Analysing the comments also led us to reflect on content reception. Being a TikTok trend evidently indicates growth in popularity, but it also means greater exposure to criticism. The Breonna Taylor trend, while giving voice to a relevant social and political movement, also represents a way to obtain views. This short circuit is at the basis of the debate around networked activism (Boccia Artieri 2021), which has gained, over the last decade, an infamous meaning. In fact, the label "performative activism" (Alperstein 2021) has been used by the audience as an accusation of content creators, implying that participating in the trend represented no more than a bandwagon and an opportunity for personal success. Of course, the use of filters and a curated self-presentation can be seen as reinforcing this view, but the main evidence of superficial participation was (for the public) the absence of a concrete call to action, such as promotion of the online petitions promoted by the BLM movement.

In conclusion, we may assert that users understood how to create effective content (content creation skills) in terms of the attention economy and therefore visibility. Also, the use of effective baits during the trend with regard to their imagined audience demonstrates the employment of social interaction skills. This imagined audience and the trend itself also show that they are taking into account the algorithmic imagery they have developed. However, when thinking about the "memefication" of a tragedy such as that which occurred to Breonna Taylor and her family, it is legit to question whether or not this kind of participation is to be considered ethical behaviour.

The Silence of Ordinary LIVEs: Social Interaction Skills Between Reward Practices and Expected Behaviours

While most of the research on TikTok focuses on sounds (Wright 2021), hashtags and communities (Krutrök 2021), the aspect of the Live page has received little attention. At the end of July 2021, TikTok (2021) improved its live streaming service, launching, among other new features, the inclusion of live content within the FYP, enabling easier access to LIVEs and therefore wider visibility. Between August and September 2021, the researchers encountered LIVE streaming suggestions multiple times, so the explorative research of this element began in September 2021 and lasted until December of the same year.

The main affordances of the TikTok LIVEs are: the possibility to use filters; the chance to receive "gifts" from the audience (expressed in stickers with different values of TikTok coins); gaining comments; and choosing followers as moderators. Moreover, TikTok LIVEs are ephemeral (they cannot be saved and posted) and they are addressed to a wide public (the audience can be potentially anyone). Contrarily to the products observed in the two previous cases, LIVEs are, by definition, immediate. As a result, this content is streamed as it is: without complex editing, a plot, or other heavily, visible manipulation of the take. This produces a sort of "raw footage" that is dissimilar to the usually curated content of TikTok. Indeed, it rapidly became clear in our results that the main characteristic of streaming is its "ordinary" dimension: they often depict the household, if not other routine locations (e.g., school, the bus stop, the park) where life occurs without no out of the ordinary events. In this way, LIVEs reinforce the idea of immediacy: they offer an invitation to share and engage with such irrelevant moments. Creators are well aware of their audiences, and they expect from them an active response. Indeed, microcelebrity practices (Zurovac and Boccia Artieri 2019) are interiorized by these users: they expect to be asked questions and provided with topics of conversation by the audience. However, of course, merely "being there" does not necessarily translate into "being interesting," and at times LIVEs are dominated by silence.

Although ordinary LIVEs are prevalent, there are some examples of more refined content that we label as "performative," albeit faced with some difficulty to specify on this definition even in view of certain distinguishing formats. As in the case of

the "get ready with me" LIVEs, where creators—mimicking a format from YouTube (Hill 2019)—fill up an insignificant moment of their time while preparing for some other activity. We also find codified formats that are TikTok native, such as the "studying LIVE." This is visible in the case of a 19-year-old girl with 190 thousand followers, who films herself at the desk in her bedroom while doing homework and listening to music. She explained the context and the engagement rules (i.e., "live studying session 1:30 hour and 5 minutes pause for chatting") on a poster positioned next to her. Moreover, in order to capitalize visibility, on the poster she includes (1) her Instagram handle, inviting "adds"; (2) an invitation to interact with the LIVE by sending hearts; and (3) a subtle request to send TikTok gifts, to support her.

Though the platform's guidelines state that users are not allowed to ask for gifts or donations of any kind, this last request appears to be common practice. Broadly, such casual invitations can also evolve into "forced interaction" when creators openly show their rules of engagement, where any interaction (such as mentioning or adding someone from the audience) has its value in TikTok gifts. Putting effort into this capitalized attention is further demonstrated by the fact that curated self-presentation appears predominant. In other words, even when the creator is recording a studying session, for instance, often their make-up, outfit and hair are nonetheless well put-together. The researchers also noted that the attention to appearance is again often vocalized by the audience, as well: no matter the content of the LIVE (even in the case of a heartbroken 15-year-old boy crying) the appearance of the TikToker would be subjected to comments.

Since most of the streamers do not involve moderators, sometimes the comments on the creators' physical features can enact a dark turn, specifically via the hyper-sexualization of underage girls, body shaming and inappropriate requests (e.g., "Can I masturbate?" or "Show me your feet"). When this occurs, the audience and the creator respond by insulting and subsequently banning any problematic commenters, in self-defence. Notably, most of the time these comments are not addressed by the creators.

The choice to remain silent can moreover represent an escape strategy from other undesired questions; most commonly this occurs when streamers do not disclose their age. It should be noted, in this sense, that nearly half of the TikTokers were younger than 16 years old. However, creators are faced with the necessity to keep this information confidential not because of its private nature, but as it represents an infraction of the platform's guidelines. In fact, in almost every video analysed, the creators included some personal data in their bio or while chatting (e.g., generalities, location or Instagram handle).

Tricking the platform by declaring a different age constitutes an unethical but easy way to gain access to the LIVE feature. A small part of the creators managed to trick the algorithm in a more complicated way, somehow figuring out how to stream even with fewer than 1000 followers. In addition, the research revealed a couple of other tendencies that demonstrate an awareness of the algorithm's functioning, namely: (1) stating that TikTok will shadow ban their content because of inappropriate behaviour (e.g., using curse words) and (2) avoiding filming an inappropriate action (such as smoking) by keeping it off screen.

In other words, while we have seen that users continuously acquire content creation skills by just performing LIVEs, the social interaction skills seem to be not so relevant—as demonstrated by the predominance of silence or the absence of a real moderation within the LIVEs. However, the attention to avoiding inappropriate behaviours or sharing sensitive information demonstrates the presence of online ethical behaviour skills, as users comprehend the potential risks of being exposed to a wider and unknown public.

Conclusions

While TikTok can tailor its users' experience in a very precise way without requiring them to express any personalization options, the three case studies detailed here demonstrate that online behaviour and social norms are the results of a negotiation between the users' grasp of TikTok's algorithm and the platform's specific affordances. On one hand, then, as Bucher and Helmond (2018) note, "How people behave, move, or simply exist in an environment affords important cues as to how others should behave, move or co-exist" (p. 9); on the other, TikTok's design and algorithm overlap in the ways they shape specific practices. It must be noted that the platform brands itself as a space in which users should "make every second count," focusing on the creation of appealing content and not on connections with peers and family. User-friendly editing tools, a regime of pseudonymity, and algorithmic ranking (Krutrök 2021) that pushes content towards a wider audience of strangers collectively reinforce elements of this process.

Taking into account the analysis undertaken to answer RQ1, it is possible to deduce that every practice or trick employed by TikTok teens sought to manage visibility. In this sense, it is possible to conclude that three main ways of applying algorithmic competency were detected: censorship, commodification and affordance exploitation. Censorship includes (1) the non-disclosure of information, such as age, in order to avoid sanctions by TikTok; (2) the modification of words, which may represent a form of "social steganography" (Boyd and Marwick 2011), though this masking of meaning is not motivated by the presence of acquaintances but rather by the perception of TikTok's "eyes"; (3) hiding behaviours that the platform discourages "in plain sight." Whatever the specific strategy, it appears clear that these practices represent a full awareness of algorithmic control.

With regard to commodification, the researchers noted three fundamental elements: (1) participating in or creating codified performances; (2) presenting the content as a means for acknowledgement in terms of economic reward and relatability; (3) the relevance of a curated appearance, in response to TikTok's beauty stigma (Melonio 2020). Commodification, in conclusion, means shaping content and self-presentation accordingly for TikTok's attention economy.

Lastly, with regard to the technical features of the platform, the exploitation of affordances is visible in: (1) the deployment of selected sounds; (2) the use of editing tools; (3) the way interactions are channelled in order to engage with a wider

public. These pieces of evidence indicate a strategic use of a set of possibilities, ranging from structural features to the employment of the audience as part of the cog in the visibility mechanism (Zurovac and Boccia Artieri 2019).

These considerations allow us to understand the ways users can interact with and trick the algorithm, but also the digital skills involved in producing content on the platform (RQ2). As mentioned, this refers therefore to the evaluation of social interaction skills, content creation skills and ethical behaviour online, and of the relevance of each category.

Considering that the platform has low barriers to expression, thanks to its tools for content editing, users are not required to develop particular skills to produce appealing videos. Even when it comes to defining a "script," most of the time this is already codified by other users in the so-called trends from which a creator can choose, since participation through repetition is one of the main ways in which content is produced. In this sense, social interaction—as part of digital skills— seems to be the basis of the content production process. As noted by Abidin (2021b), this can assume the shape of "silosociality," although social interaction is also the context in which users learn how to perform by just existing. However, despite the centrality of interactions from the perspective of visibility, social interaction skills do not always seem to be particularly developed. Indeed, the three cases analysed here show different ways of interacting with others albeit with a shared purpose, as characterized by: (1) the lack of conversations happening in the comment section, (2) the presence of comments just for the sake of visibility; (3) the absence of norms regulating conversational exchanges—because even in the presence of moderators the interactions appeared to be mostly inappropriate, in terms of netiquette. This last observation is in line with what has been illustrated in the analysis regarding unethical behaviours. In fact, sustained by pseudonymity and the possible hugeness of an unknown audience, users tend to freely share content while perceiving the TikTok universe as something detached from their everyday life contexts.

That means that users are willing to share private or problematic content because what is licit is decided by the algorithmic imaginary and silosociality, under the false myth that what happens on TikTok stays on TikTok.

In conclusion, while it is not possible to assert whether or not the digital skills employed have been acquired before the encounter with the platform, these tales suggest that the algorithm (as it is perceived and imagined by the users) plays a significant role in making users develop peculiar practices (that we interpreted as algorithmic skills) in order to manage visibility.

References

Abidin C (2021a) From "networked publics" to "refracted publics": a companion framework for researching "below the radar" studies. Soc Media Soc 7:1–13. https://doi.org/10.1177/2056305120984458

Abidin C (2021b) Mapping internet celebrity on TikTok: exploring attention economies and visibility labours. Cult Sci J 12(1):77–103. https://doi.org/10.5334/csci.140

Alperstein N (2021) The present and future of performing media activism. In: Performing media activism in the digital age. Palgrave Macmillan, Cham, pp 211–235

Barradale G (2021) This is the story behind the 'step on the gas' TikTok audio. Thetab.com, June 16. Retrieved on https://thetab.com/uk/2021/06/16/this-is-the-story-behind-the-step-on-the-gas-tiktok-audio-210543

Bhandari A, Bimo S (2020) TikTok and the "algorithmized self": a new model of online interaction. AoIR Select Pap Internet Res. https://doi.org/10.5210/spir.v2020i0.11172

Bishop S (2019) Managing visibility on YouTube through algorithmic gossip. New Media Soc 21(11–12):2589–2606. https://doi.org/10.1177/1461444819854731

Boccia Artieri G (2020) Fare Sociologia attraverso l'algoritmo: potere, cultura e agency

Boccia Artieri G (2021) Networked participation: selfie protest and ephemeral public spheres. In: Della Ratta D, Lovink G, Numerico T, Sarram P (eds) The aesthetics and politics of the online self. ISBN: 978-3-030-65497-9

Boyd D, Marwick AE (2011) Social privacy in networked publics: teens' attitudes, practices, and strategies. In: A decade in internet time: symposium on the dynamics of the internet and society, September

Bucher T (2017) The algorithmic imaginary: exploring the ordinary affects of Facebook algorithms. Inf Commun Soc 20(1):30–44

Bucher T, Helmond A (2018) The affordances of social media platforms. In: Burgess J, Marwick A, Poell T (eds) The SAGE handbook of social media. SAGE

Chung AW (2020) Subverting the algorithm: examining anti-algorithmic tactics on social media. Doctoral dissertation, Massachusetts Institute of Technology

Eslami M, Karahalios K, Sandvig C, Vaccaro K, Rickman A, Hamilton K, Kirlik A (2016) First I "like" it, then I hide it: folk theories of social feeds. In: Proceedings of the 2016 CHI conference on human factors in computing systems, pp 2371–2382

Francisco MEZ, Ruhela S (2021) Investigating TikTok as an AI user platform. In: 2021 2nd international conference on computation, automation and knowledge management (ICCAKM), January. IEEE, pp 293–298

Gillespie T (2014) The relevance of algorithms. In: Media technologies: essays on communication, materiality, and society. MIT Press Scholarship, pp 167–193

Haddon L, Cino D, Doyle M-A, Livingstone S, Mascheroni G, Stoilova M (2020) Children's and young people's digital skills: a systematic evidence review. ySKILLS, Leuven

Haider J, Sundin O (2021) Information literacy as a site for anticipation: temporal tactics for infrastructural meaning-making and algo-rhythm awareness. J Doc. https://doi.org/10.1108/JD-11-2020-0204

Harriger JA, Evans JA, Thompson JK, Tylka TL (2022) The dangers of the rabbit hole: reflections on social media as a portal into a distorted world of edited bodies and eating disorder risk and the role of algorithms. Body Image 41:292–297

Harris M (2020) TikTok apologized for the glitch affecting the 'black lives matter' hashtag after accusations of censorship: 'we know this came at a painful time'. Insider, June 1. Retrieved on https://bit.ly/3fzehzb

Hill AL (2019) 'GRWM': modes of aesthetic observance, surveillance, and subversion on YouTube. In: Digitalität und Privatheit. pp 329–352

Hine C (2015) Ethnography for the internet: embedded, embodied and everyday. Bloomsbury, London

Karizat N, Delmonaco D, Eslami M, Andalibi N (2021) Algorithmic folk theories and identity: how TikTok users co-produce knowledge of identity and engage in algorithmic resistance. Proc ACM Human Comput Interact 5(CSCW2):1–44

Klug D, Qin Y, Evans M, Kaufman G (2021) Trick and please. A mixed-method study on user assumptions about the TikTok algorithm. In: 13th ACM web science conference 2021, June, pp 84–92

Krutrök ME (2021) Algorithmic closeness in mourning: vernaculars of the hashtag #grief on TikTok. Soc Media Soc 7(3):20563051211042396

Martin R (2019) TikTok, the Internet's hottest meme breeding ground, turns 1. NPR, August 5. Retrieved on https://www.npr.org/2019/08/05/748163919/TikTok-the-internets-hottest-meme-breeding-ground-turns-1

Marwick AE, Boyd D (2011) I tweet honestly, I tweet passionately: twitter users, context collapse, and the imagined audience. New Media Soc 13(1):114–133

Medina Serrano JC, Papakyriakopoulos O, Hegelich S (2020) Dancing to the partisan beat: a first analysis of political communication on TikTok. In: 12th ACM conference on web science, July, pp 257–266

Melonio P (2020) TikTok's non-inclusive beauty algorithm & why we should care. IPHS 200: programming humanity. Paper 22

Noble S (2018) Algorithms of oppression: how search engines reinforce racism. NYU Press, New York

O'Neil C (2016) Weapons of math destruction: how big data increases inequality and threatens democracy. New York: Crown Publishers

Radovanović D, Hogan B, Lalić D (2015) Overcoming digital divides in higher education: digital literacy beyond Facebook. New Media Soc 17(10):1733–1749. https://doi.org/10.1177/1461444815588323

Savic M, Albury K (2019) Most adults have never heard of TikTok. That's by design. The Conversation, July 11. Retrieved on https://theconversation.com/most-adults-have-never-heard-of-TikTok-thats-by-design-119815

Schellewald A (2021) On getting carried away by the TikTok algorithm. AoIR Select Pap Internet Res

Shifman L (2013) Memes in a digital world: reconciling with a conceptual troublemaker. J Comput-Mediat Commun 18(3):362–377

Smith B (2021) How TikTok reads your mind. Retrieved from https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html

Statista (2021) Distribution of global TikTok creators 2021, by age group. Retrieved on https://www.statista.com/statistics/1257721/TikTok-creators-by-age-worldwide/

TikTok (2020) How TikTok recommends videos #ForYou, June 18. https://newsroom.TikTok.com/en-us/how-TikTok-recommends-videos-for-you/

TikTok (2021) All the ways you can enjoy LIVE with TikTok. https://newsroom.TikTok.com/en-us/TikTok-live-features-2021

Van Dijck J (2013) Social media platforms as producers. In: Producing the internet. Critical perspectives of social media. Nordicom, pp 45–62

Vázquez-Herrero J, Negreira-Rey M-C, López-García X (2020) Let's dance the news! How the news media are adapting to the logic of TikTok. Journalism. https://doi.org/10.1177/1464884920969092

Wall Street Journal (2021) Investigation: how TikTok's algorithm figures out your deepest desires. Retrieved on https://www.wsj.com/video/series/inside-TikToks-highly-secretive-algorithm/investigation-how-TikTok-algorithm-figures-out-your-deepest-desires

Weimann G, Masri N (2020) Research note: spreading hate on TikTok. Stud Conflict Terror. https://doi.org/10.1080/1057610X.2020.1780027

Wright L (2021) The sound of identity: audios and hashtags as nexuses of practice on TikTok

Yu JX (2019) Research on TikTok APP based on user-centric theory. Appl Sci Innov Res 3(1):28

Zulli D, Zulli DJ (2020) Extending the internet meme: conceptualizing technological mimesis and imitation publics on the TikTok platform. New Media Soc 24:1461444820983603

Zurovac E, Boccia Artieri G (2019) Performing and perceiving the microcelebrity status in snapchat: an Italian case study. In: Desecrating celebrity. Proceedings of the IV international celebrity studies journal conference. https://doi.org/10.4458/2719