The Algorithmic Bias of Social Media

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Abstract

Social media apps like YouTube and Instagram came as platforms that allowed users to express themselves freely to their friends and families, but corporations changed social media down to its core. Due to the rising popularity of short video-based content on TikTok, platforms like Instagram introduced similar content to capitalize on the hype that TikTok created. In doing so, Instagram made changes to the content promotion algorithm to promote 'Reels' over the other content options. Driven by profits the company stopped caring about their users, leading to backlash from the community. Creators on the platform started playing a visibility game (Cotter, 2019) to grow and be seen in user feeds, the 'game' pushes them to make content they would not be making in the first place and follow trends. In this paper, I am looking at the case of a creator in the photography community affected by these changes in algorithms and analyzing the situation through a critical media theory framework. The study discusses the practices of the platform and the effects on the creator community while also looking at resistance from users. I also discuss a new potential alternative platform to Instagram for photographers, that markets itself as a platform built without an algorithm, for a community.

Keywords

Algorithm, Instagram, creators, political economy, participatory culture

Instagram, as we know it, is the staple picture-sharing platform. It has built itself on the idea that anyone can post anything. The platform has been adopted by creatives all over the globe to showcase their work to audiences and grow as artists. In the last few years, *Meta Platforms*, the owner of Instagram, has been making changes to the app that have changed the core aspects of what the platform was. The changes have been affecting creators on the platform in one way or another. The case I am looking at is that of the content creator Peter McKinnon, one of the most prominent names in the photography community. Looking at that case, I will be analyzing the algorithmic bias of Instagram in the promotion of content posted. The platform boasts itself on its liberation of expression; "…post what you want" (Instagram, 2023) but in practice it is different. Since the release of reels in the summer of 2020, the short videos-based content has been pushed as the 'new' content on the platform which has led to the suppression of picture-based content which the platform built itself on. McKinnon saw growth in his account, gaining hundreds of followers every day until it stopped, and he started losing followers (Figure 1). He started losing followers and engagement on his posts after some changes rolled out in June, as stated in his video titled "*the end of Instagram,*" where he talks about the issue in detail.

Figure 1

Peter McKinnon's Instagram follower insights.
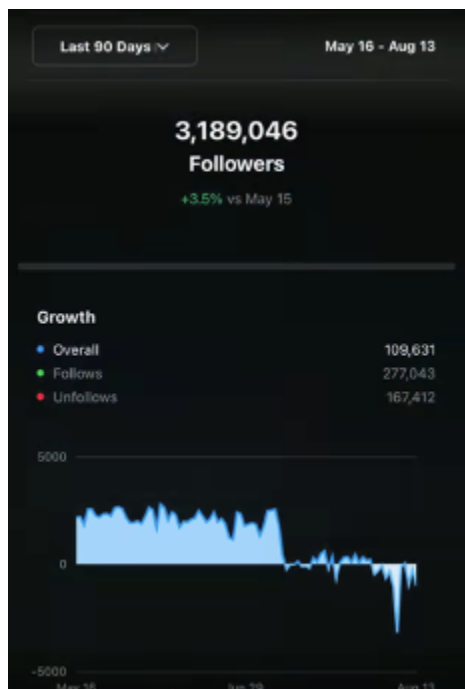
Note. (McKinnon, 2021).

McKinnon backed up his claims about Instagram and its changes with his follower insight reports from the months around the publishing of the video. A quick look through his feed shows how much it has affected his engagement, Figures 2 and 3 compare posts from before the changes and after said algorithm changes, respectively.
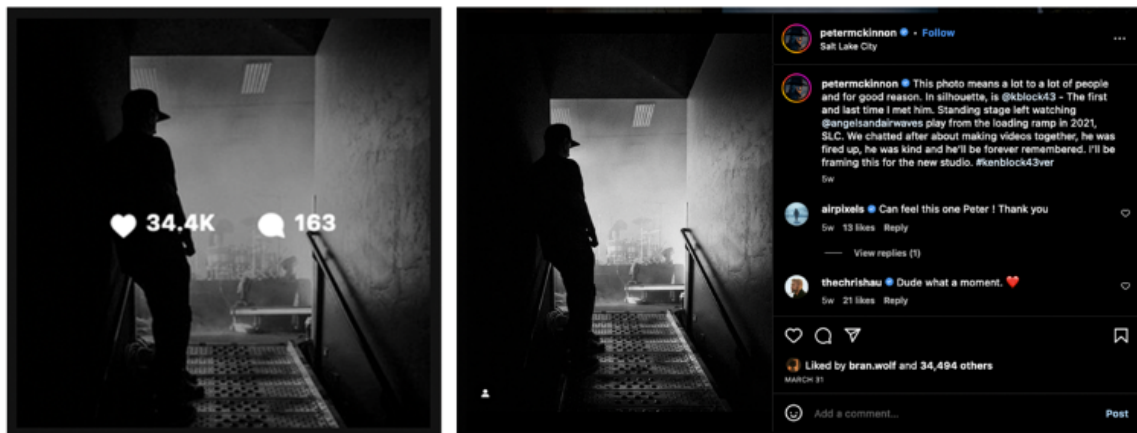
Figure 2

Peter McKinnon's post engagement before the changes.

Note. (McKinnon, 2021).

Figure 3

Peter McKinnon's post engagement after the changes.

Note. (McKinnon, 2023).

Observing the difference between likes makes it clear how adversely the algorithmic changes have affected his online presence. McKinnon went from consistently getting eighty thousand likes to a hundred and twenty thousand likes each post on an average to between thirty-five thousand and sixty thousand likes per post owing to the lack of visibility in his followers' feeds. Such reduced engagement in picture-based content is seen often, pushing people to make content they would not want to make by choice.

Instagram changed its algorithm to effectively 'shadowban' content not aligning with its new targets. Shadowbanning is "when, without notice or explanation, a user's post(s) is prevented from appearing in different spaces on the platform, making the content much less likely to reach non-followers," as explained by Cotter (2021, p. 2) while discussing the practice in the context of influencers. What has changed is that people are seeing less content that they want to see themselves and are seeing more of the content that Instagram wants them to see. Influencers and content creators like McKinnon have been vocal about this issue for a while now, his case stands out to me as he is one of the earliest adopters of the platform for its 'community and creator first' ideologies. In this analysis, I will be looking at this change in the algorithm of Instagram and its biases, through a critical theory framework with lenses of political-economy, digital creativity and participatory culture.

Political-Economy Shaping of Algorithms

Mosco (2009) identifies commodification as one of the main three points for a political economy of communications (pp. 1-2), arguing that new media facilitated the process as it is rooted in the process of digitization, the efficient use of digital networks expands on the commodification of content (p. 135). He also highlights structuration as one of the entry points to a political economy, noting how social action occurs within opportunities provided by social structures (p. 16). Putting emphasis on power and structure concentrates a study on social class which becomes necessary to examine relations and actions within a hegemony (Mosco, 2009 p. 185).

Within the context of Instagram, moving forward with an algorithm that promotes reels more than picture-based content shows how it has commodified artistic expression. The

algorithm is programmed in a way to only boost content that aligns with the company's view of 'profitable,' which, for now, is the new shorts-based content of reels. In order to boost reels, Instagram makes it so people cannot see picture-based content even if they follow the creator. This bias was clearly depicted in the case of McKinnon, who refused to give into the trends and post reels. He saw a decline in his account and a lower reach in the community. Flew & Smith (2021) refer to new media as a business (p. 81), moving towards the trend of short video-based content, attempting to challenge TikTok, Instagram's view for profits changed. Within the business of Instagram, by extension Meta, there is a visible power structure that directs creative choices and actions which places the users at the lowest owing to the company only caring about their profits when policies are made.

The pictures and community-driven content were not seen as profitable anymore and reels were seen as a platform for advertising through brand partnerships, sponsored content, and promotional culture. As reels have a higher potential for reach and engagement, brands use those to promote their product and advertising, be it in the form of sponsorships and product placement or explicitly structured advertisements. It would be ignorant to say that sponsored content has not been infesting feeds before reels, but the ease of access in reels has made it exponentially more visible. Targeted advertising in the forms of reels and boosted content sits on top of the creative content you chose to follow someone for.

Digital Creativity Being Limited by New Media

Discussions around new media and creativity bring us to the notion of new media fostering creative expression. In the case of McKinnon, Instagram's decision of changing its algorithm, new media is limiting creativity instead of facilitating it. The changes in the algorithm, manipulating content exposure, have led to limitations on what a creator can or cannot do. The discourse in the comments of the video in question talks about how reels force people into standardized content and 'trendy audios' to stay relevant (Figure 4) or even have their audiences see their content, which in turn inhibits artistic expression.

Figure 4

A screenshot from the comment section of 'the end of instagram'
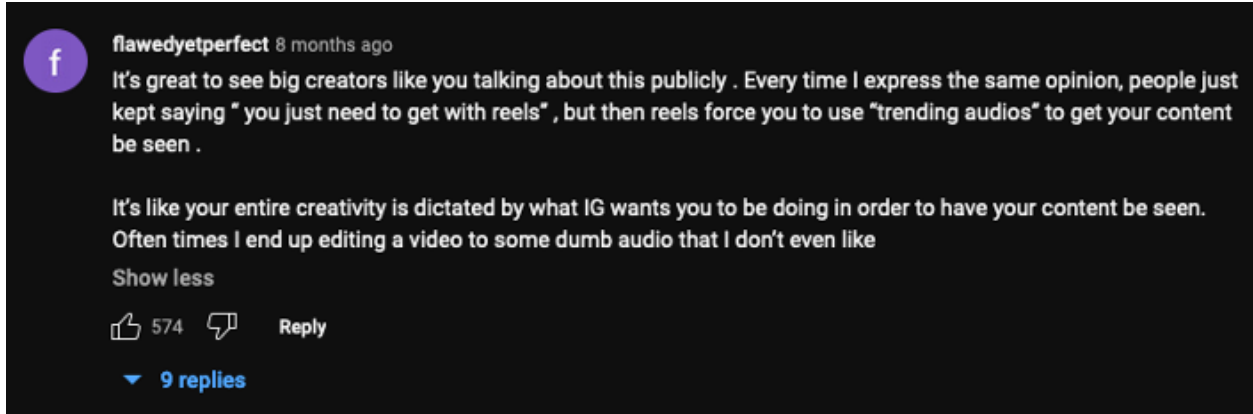
(@flawedyetperfect, 2022)

Horkheimer and Adorno (2012) raise the point of how "culture today is infecting everything with sameness" (p. 53), criticizing the mass production of culture which in turn creates a system where technology gains power over society and puts it in the power of the economically stronger (p. 54). Their criticism of standardization becomes relevant to McKinnon's case study in the digital age with these policy changes standardizing content creation over a medium that was made to express one's creativity. As reflected in the discussion of political-economy, advertising drives this 'culture industry' (Horkheimer and Adorno, 2012), and commodification influences how those in power affect the creative freedom of creators over social media.

Creators cannot do what they want to and feel pressured to do things that don't align with their artistic vision. McKinnon did not want to jump on the hype of reels and switch up the content he built his community on, so he was instead 'punished' for doing what he wanted to and making the content he preferred. McKinnon is one of the many creators that are currently being 'forced' by Instagram in a way to change their primary content and make standardized reels to grow, all to 'play a visibility game' (Cotter, 2019) on a platform that's regulating their content and conditioning their exposure.

According to Cotter (2019), the "game" must be played to attain influence (p. 904). Influence and engagement are vital to growth on the platform, but the creators are unable to grow with the content they want to make or even enjoy making. Limitations as such affect the creative process in the production stage, creators must think first before going through with a vision for a

post on the platform. McKinnon (2022) raises the point of how Instagram has become this "not-so-creative depth of the internet doomscroll" (0:56), unlike the creative and community-driven platform it used to be.

Resistance as Participatory Culture

Jenkins (2006) argues that in participatory media culture, media producers and consumers are transformed into participants interacting with a new set of rules (para 4). Talking about participation in a networked community, Jenkins et al. (2015) propose a good point about members in a participatory culture feeling some degree of social connection (Chapter 1: Defining participatory culture, para 7); this is clearly demonstrated by social networks in creator communities. Resistance and pushback are a big part of networked communities owing to their light structure and openness, leading to a participatory culture formed around resistance.

The community aspect of Instagram, from the creator to their narrowcasted audience, defined the platform and its uses upon inception. In McKinnon's case, his community had formed a relationship with him over the course of a decade, the community became a means of resistance against the platform's algorithmic bias. His community decided to 'battle' the algorithm by engaging with his content and turning on post notifications to boost his work's reach since the algorithm promotes content that people are engaging with. This resistance is common in creative communities, the phrase 'like, comment, share, subscribe' from YouTube came up to encourage post engagement so content could reach more people. This goes to show algorithmic conditioning of content exposure has been here since the gentrification and commodification of YouTube, like what is happening to Instagram right now.

In a form of resistance, McKinnon talked about this new platform called *Vero,* which is a community-driven platform. Switching to a different platform with him, as a form of resistance proved how strong his audience's sense of community is. The platform boasts itself of being an authentic space for connections, talking about how previous platforms have had imbalances between user interests and corporate interests. Vero presents itself as the platform for photographers that Instagram was supposed to be, mentioning how they do not have an algorithm because their incentives are aligned with ours (Vero, 2023, Mission). Discourse in the comments goes on about how Vero is bringing the 'fun' back in sharing pictures again; sharing their work

with other photographers and members of the community who will see the content they want to, with no platform interference.

Conclusion

With this analysis, I set out to look at changes in the Instagram algorithm that are boosting content. The clearest findings come back to the fact that the platform is driven more by profits and commodification instead of the expression liberation it boasts itself on. Since this study was done after the update rollout happened in the summer of 2022, I lacked data on the interactions happening actively between the users of the community. There was a discussion to be had around interactivity and how the experience of resistance and participation has been mediated online, but I could not go deeper into it due to the lack of data in my case study. The platform has shown a trend of bringing in changes and reverting them, as McKinnon (2022) put it "they are trying to fit into a shape that another brand created" (06:48). Around the same time as the algorithm changes, Instagram tried testing a new user interface redesign with full-screen content, attempting to replicate TikTok explicitly (Southern, 2022, para. 4). The backlash Meta faced against this redesign pushed them to revert said changes, showing that the findings of the study about resistance are consistent with user experiences. Peter McKinnon's case is one of many in the creative community that has been punished by Instagram with these new changes in the algorithms. Even though the algorithms make it difficult for them to make the content they want, their communities are resisting it in attempts to liberate expression.

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