Technological Change and Impact of TikTok from the Perspective of Communicative Affordances

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Abstract: In recent years, online video has shifted from computer-based platforms to readily accessible short-form video applications based on mobile devices, such as smartphones(Hartley et al., 2013). TikTok is a successful short-form mobile video application. The platform transforms active internet use into passive ongoing consumption through technological changes such as algorithmic recommendation techniques, but also encourages active sharing and production of videos through filters, challenges, background music provision and comments(Brown, et al., 2022). TikTok's popularity has influenced people's media usage habits, thus it is important to study what the platform offers to people and what kind of impact it has. This essay will analyze how the technological changes brought by TikTok have impacted the social, economic, political, and cultural spheres from a communicative affordance perspective.

Keywords: TikTok; Short Video; Platform; Communicative Affordances; Media and Culture

1. Introduction

The concept of affordance was first introduced by the American ecological psychologist James Gibson(1986) to explain the correspondence between animals and their environment. According to Gibson(1986), the affordance of an environment is the possibility of action that this environment offers to animals. The concept of affordances was subsequently introduced into the fields of communication, design, and other fields.

Communication scholar Andrew Schrock (2015) tried to expand the concept of affordance to further emphasize the social nature of technology or media object. He states that the communicative affordance theoretical framework considers mobile media as having portability, availability, and locatability as well as multimediality. Communicative affordance shifts the Gibson automatic perception of "need" to a number of factors that influence perception. This further simplifies affordances to the subject's perception of the object's utility, and socializing the functions provided by technology to emphasize the subject's creative use of the technology or media objects (Schrock, 2015).

2. TikTok's Availablilty: From Viewing to Participating

TikTok platform availability affords simple interface design, duet function, diverse interaction modes and algorithm system, which completes the transformation of users from watching to participating. TikTok increases people's engagement through technically availability. For example, TikTok's interface is designed so that when you click the share button, "send to" "share to" appears (1)Message (2)SMS (3) Copy Link (4) Facebook (5) other. The convenient interface and button design encourage users to share and forward, and strengthen people's connection. In addition to encouraging sharing, TikTok's availability allows people to create their own videos with a variety of editing styles and filters, unlike previous video platforms that only allow them to watch and comment on videos. TikTok also affords users to freely initiate "Challenge" activities on the platform, increasing user engagement and activation. "Challenge" is a call to action for users to record content with specific music by giving them a template or filter, thus greatly reducing the difficulty of creation. For example, the #yeehaw challenge(Remier and Peter, 2022). To accept the challenge, people were asked to use the song *Old Town Road* to change at a rhythmical point in order to complete a short video shoot. In this process, people

spontaneously participated in the short video creation process, while also bringing traffic to the platform, consuming the short videos, becoming visual labours, and driving the distribution of the content(Toscher, 2021). The user's engagement has huge power, *Old Town Road*, which was used as the music for the above challenge, was the first single ever to unlock the "15X Platinum" achievement and is currently the most successful TikTok music marketing case in history(Remier and Peter, 2022).

TikTok's availability is reflected in the algorithmic feature recommendation system "For you", which allows users to view videos posted by users they did not follow before on homepage and encourage them to explore areas they have not followed in the past (Zhao, 2020). In addition to the advantages of personalized recommendation, the accuracy of algorithmic recommendation system also brings disadvantages. If users like certain video content, the system will automatically recommend similar content and videos to users continuously. This may generate information barriers and creating information cocoon room effect, reinforcing people's inherent ideas and preventing them from perceiving the real external environment(Peng and Liu,2021；Zhao, 2020).

3. TikTok's Multimediality: Driving Popular Culture

TikTok's multimediality is shaping popular culture, and trends on TikTok tend to be music-centric. Multimediality allowing users to enjoy short videos almost exclusively with music. Since 2020, TikTok has established partnerships with companies such as Sony Records and Warner Music, affords TikTok users to use music resources from these companies as background music in their short videos, further enhancing the quality of the platform's content and encouraging user creativity (Toscher, 2021). On the other hand, TikTok allows users to use the music they create, which reduces the functional attributes of the music industry's gatekeepers and gives musicians the freedom to release their own music(Remier & Peter, 2022). At the same time, the multimediality of TikTok enables the users to freely use the duet function with visual displays. This high level of co-creation has allowed some songs to return to the Billboard Top 40 through secondary creation of short videos, such as *Dreams*, a song released by London band Fleetwood Mac in 1977. And *love nwantiti*, which is considered as the most successful song in Africa popular music history. *Love nwantiti* nearly had no attention at first, after TikTok's secondary creation and dissemination, it became popular (Remier & Peter, 2022).

TikTok's multimediality drive the creation and development of user generated content(UGC). When Gayle's song *ABCDEFU* was released, although the record company promoted the song on TikTok, the feedback from the market was not good.   Till some TikTok users spontaneously combined the hand gesture dance with the song that the song really went viral(Nazareno, 2022). Whether it was lip-syncing or various choreographies and special effects, TikTok users often used the built-in features to create secondary compositions that responded to the music with videos. This has revolutionized the way music is interacted with, making TikTok the peak of UGC and a new way to promote music. Despites these advantages, these trends brought controversy. After the song became popular, users might view dozens of short videos using the same music in a row, which might make them aesthetically tired. Likewise, such hot market feedback can lead musicians to disregard their creative independence, simply to cater to the preferences of the market(Toscher, 2021).

4. TikTok's Affordances: Increase the Political Participation

The core function of TikTok is a short-video music social app with a focus on entertainment(Brown et al., 2022). TikTok, as an anonymized online space, does have an impact on political activism(Abbas et al., 2022: Brown et al;., 2022). The communicative affordance of TikTok has turned many young users to TikTok to share live footage from the ground, in the vein of citizen journalists (Wilson 2019). TikTok's hashtag feature, which can quickly attract people interested in the same topic, has a strong appeal. In the Black Lives Matter march in the United States, people used TikTok to launch marches and other events. Similarly, TikTok also played a political role in the bush fires in Australia, where a number of videos critical of Scott Morrsion were widely distributed in a humorous way, and young people enjoyed using TikTok as a social media platform to engage in political discussions in a more informal way(Brown et al., 2022).

However, TikTok's political influence has brought some drawbacks. Many study points out social media platform is seen as contributing to disinformation, engaging in online agenda-setting and influencing users' thoughts and topics(Abbas et al., 2022). New research from the Mozilla Foundation suggests that TikTok is contributing to heightening political tensions in the Kenya's elections

(Hsu,2022). After reviewing 130 highly rated videos , researcher Madung (2022) found that shared content filled with hate speech, incitement and political disinformation which is contrary to TikTok's policy against.

5. TikTok's Communicative Affordances: Promote the Development of

E-commerce

In the pandemic era, many offline shops have closed and people are increasingly relying on social media platforms. TikTok's influencers make use of the multimediality and availability of the platform to carry out secondary creation, attract fans and gradually increase their influence to develop the attention economy (Abidin, 2020). TikTok also seized the opportunity to launch its live streaming function in the United Kingdom, United States and Southeast Asia by applying the mature communicative affordance function of the platform, hoping to replicate China's successful experience abroad(Criddle, 2022). After the TikTok Shop feature launched, some retail brands, such as TopShop, even turned their store employees into online celebrities to boost sales. In Southeast Asia, such as the Philippines, TikTok has partnered with retail e-commerce platforms etaily, which even hope to cater to TikTok's user preferences to achieve high sales. The TikTok platform has certainly promoted e-commerce in some areas. Live streaming success examples include Colourette Cosmetics, which outperformed expectations by nine times in the first 15 days of live streaming (Business Mirror, 2022). However, TikTok's model has met a culture shock in the UK. Aggressive subsidies have failed to arouse the enthusiasm of British users and internet celebrities for live streaming e-commerce, and even the low price marketing model has encountered resistance from big brands(Criddle, 2022).

6. Conclusion

This paper presents the concept of affordances proposed by previous scholars, and analyzes the impact of TikTok's feature transformation and user interaction in different fields under the framework of affordances. Through analysis, it can be found that technology is no longer simply used as a mediator or strategy to influence people's experience, but provides the availability in the whole process of use and interacts with people's perception. From the perspective of the whole industry development of short video social networking, the technology and function are constantly updated and changing, the research in this field can continue to be further explored.

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