Today's College Students' Aesthetic Mechanisms from an Algorithmic Re-domestication Perspective

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Abstract: The emergence of short video platforms has undeniably brought about a significant transformation in society. The process of re-domestication involves the adaptation of individuals' interactions with and utilization of previous technologies. The advent of the internet and the subsequent proliferation of novel social media platforms have engendered a plethora of new societal impacts. Social media platforms, including TikTok, are believed to have a substantial influence on the aesthetic preferences of college students. The choice to redomesticate the media is a rebellion against the more anxiety-inducing aspects of society. It is apparent from casual conversations that present-day university students exhibit a discerning mindset when confronted with aesthetic unease stemming from TikTok algorithms. Individuals continue to prioritize their initial choices and demonstrate this through practical application, thereby reconfiguring the algorithms to align with their personal aesthetic tastes. A significant proportion of college students engage in critical analysis of media information, expressing a sense of disillusionment towards the prevalence of comparisons seen on the internet.

Keywords: re-domestication, aesthetic mechanisms, TikTok, social media

1. Introduction

The emergence of short video platforms has undeniably brought about a significant transformation in society, fundamentally altering how individuals obtain information, seek entertainment, and engage in communication [1]. According to Florida (2014), Based on recent statistical data, it has been observed that the total number of individuals utilizing short video platforms has achieved a significant milestone of 1.012 billion in the year 2022. This figure represents a substantial proportion of 94.8% of the overall population of internet users [2]. The data presented highlights the substantial influence of short videos as a main medium for both information intake and enjoyment. Nevertheless, concurrent with the rise in popularity of short video platforms, there has been a growing apprehension around algorithmic worry. Users express concerns about potential content deprivation resulting from the algorithms responsible for curating and prioritizing the information they encounter. The topic at hand holds special significance within the demographic of young college students, who frequently encounter feelings of distress regarding their physical appearance as a result of the promotion of an "ideal beauty" standard disseminated through various social media platforms. Hence, it is imperative to scrutinize the impact of social media platforms on the influence of data about aesthetic preference.

The primary objective of this study article is to gain a comprehensive understanding of the impact

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of data on aesthetic preferences, while also delving into the notion of "re-domestication" among individuals engaged with media. Through an analysis of the phenomenon of algorithmic curation, one can discern its impact on the preferences and decision-making processes of humans.

2. Literature review

2.1. Conceptualizing domestication process in the context of social media

The process of domestication exhibits distinct characteristics when compared to biological processes. From a traditional standpoint, the term "domesticate" pertains to the act of taming wild animals to utilize them in the service of human production and livelihood [3]. Silverstone highlights the inherent duality of information technology, which can be understood as both "objects" and "media."[4]. Silverstone characterizes the connection between information and communication technology (ICTs) and individual actions as "double articulated." On the one hand, technology is perceived as a practical tool that serves utilitarian purposes in personal contexts. However, technology is also perceived as a medium that produces novel interpretations through its utilization, enabling individuals to actively participate in the communal sphere.

The achievement of domesticating the influence of algorithm suggestions in the field of biology involves the introduction of the notion of "domestication." This can be accomplished by implementing artificially predetermined weighting rules and incorporating conscious behavioral input. About the process of reverse domestication, the data effectively conforms to the users' video content, while simultaneously somewhat obscuring the user's cognitive map [5]. The process of redomestication involves the adaptation of individuals' interactions with and utilization of previous technologies as new advancements are introduced into the realm of information and communication technologies (ICTs) [6].

2.2. The role of user subjectivity agency in the re-domestication processes

Within the theoretical framework of domestication theory, it is posited that users do not merely passively acquiesce to the dominance and control exerted by media technology. Instead, they assume an active role as users, adaptors, and even "dominators" to some extent [5].

Indeed, the process of domestication within the realm of media is a continuous and ever-evolving phenomenon. Throughout the process of domestication, proactive individuals will continue to promote the advancement of technology through "re-domestication," despite the challenges posed by the phenomenon of "reverse domestication" caused by technology. This finding aligns with prior research. The notion of domestication places emphasis on the active role and agency of consumers in their daily consumption of media [7]. Additionally, this study emphasizes the intricate circumstances and backgrounds within which domestication processes take place. Finally, it should be noted that domestication is a perpetual and unceasing process that lacks a definitive conclusion. Based on the aforementioned rationale, it is imperative to acknowledge that a comprehensive understanding of user behavior cannot be attained solely by directing attention to the first domestication of media technology. Individuals can articulate their perspectives and generate original content via various digital platforms such as social media, blogs, and video-sharing websites [8]. Consequently, they assume the roles of both content creators and distributors, contributing to the dissemination of knowledge. The presence of user subjectivity enables the potential for media re-domestication and the disruption of the traditional media's one-way communication paradigm. Ying Huang and Wei Shanmiao conducted a study wherein they examined individuals' daily interactions with WeChat. The authors highlighted that the re-domestication of WeChat Moments might be considered as a "reboot" of the entire domestication process [9]. This technology enables individuals to engage in introspection and utilize a transformative application feature as a pivotal tool for enhancing their welfare.

2.3. Societal aesthetics and its relation to algorithmic biases

The advent of the internet and the subsequent proliferation of novel social media platforms have engendered a plethora of new societal impacts. Based on questionnaires administered to a cohort of young college students, a significant association has been observed between the frequency of engagement with social media platforms and the level of body image worry experienced by individuals. The regular utilization of social media platforms can potentially elevate the likelihood of appearance-related concerns in the adolescent population [10]. Individuals find themselves constrained by the prevailing conventional standards of beauty, encompassing several aspects such as fashion choices and cosmetic application techniques. The concept of "The ideal beauty" can be understood as an aesthetic criterion that varies across different social groups. Following its dissemination through social media within the realms of social and cultural domains, the concept eventually garners recognition and familiarity among other persons within these domains, subsequently evolving into a widely accepted and pervasive aesthetic standard [11]. However, it is important to acknowledge the occurrence of anti-body phobia, wherein individuals tend to rely on their discretion to determine their preferred aesthetic preferences. The phenomenon in question is commonly referred to as "re-domestication." The individuals initiated an investigation of the contextual information presented by the algorithm.

3. Methods

3.1. Measure

This study used the interview approach to get insight into the psychological state and behavioral orientation of the participants through direct conversation, to acquire fundamental information and primary data. During the interview process, a predetermined outline is established to guide the proceedings. While the interview remains focused on this outline, it is not strictly confined to it. The specific questions posed during the interview may be modified at any point to accommodate the unique characteristics of the interviewees. This adaptive approach ensures that the interview results are comprehensive and yield meaningful outcomes. This paper also conducted an extensive search on the Internet to locate previously developed scales that could facilitate a more comprehensive examination of the phenomena. The interview was meticulously crafted to comprehend the individual experiences of each participant about social media, as well as explore the intricate interplay between social media usage and the manifestation of both good and negative emotions.

3.2. Participants

According to the theory of domestication, a study conducted by Dutch academic Schöld et al. revealed that individuals with higher levels of education had a discerning perspective towards the Internet across all four phases. These individuals approached Internet usage with caution and sought to derive new meanings from their online experiences [12]. In the process of selecting interview participants, my attention was directed towards female college students who engage in Internet usage for a duration exceeding two hours every day. In general, the individuals who were interviewed had utilized the Tic Tok application for a duration exceeding one year and had undergone the process of uninstalling and subsequently reinstalling the app at least once, which served as a need for re-domestication.

Table 1: Interviewer information statistics

Name	Age	Major	Gender
Tianyue Li	19	Chinese	Female

Table 1: (continued)

Yuanyuan Yao	20	Accounting	
Xintong Wei	18	law	
Fangyu Zhang	19	Physics	
Lingyu Zhang	19	Journalism	
Rui Wang	18	Pharmacy	
Shaohua Yang	20	Physical Education	

4. The present study

The objective of the current study was to investigate the associations between individuals' redomestication of social media and their levels of appearance satisfaction. The primary objective of this study was to investigate the process of domestication and the societal consequences of female college students' re-domestication of media.

H1: The alignment between the definition of college student style and the principles of the redomestication theory is observed when they engage in watching short films.

H2: The Impact of Algorithmic Anti-Domestication on College Students' Critical Thinking and Emotional Engagement in Short Videos of Recommended Products, and Their Decision to Re-Domesticate Media.

Question 1: In what situations do college students detect the phenomenon of reverse-domestication of the media, what emotional responses do they exhibit, and do they opt to re-domesticate the media?

Question 2: To what extent does the process of re-domestication contribute to the dynamics of aesthetic interest interaction?

5. Findings

5.1. Re-domestication and the Aesthetic Interest Interaction

Social media platforms, including TikTok, are believed to have a substantial influence on the aesthetic preferences of college students, as suggested by preliminary research studies. [13] These studies have shown a correlation between the content presented on these platforms and the fashion choices and consumer behavior of college students. However, it is important to note that the algorithms used by social media platforms, such as TikTok, can impact the aesthetic preferences of college students. These algorithms are designed to promote content that aligns with prevailing trends and popular subjects, such as "Maillard Style," "Dopamine," "Clean Fit," and "Kpop." This curated content often includes promotional efforts by retailers and bloggers, effectively combining e-commerce and social media. As a result, college students may be influenced by these algorithmic recommendations when making purchasing decisions.

Additionally, during observation, the constant modifications made to algorithms can lead to a phenomenon known as "reverse domestication" among college students. This refers to a situation where individuals, instead of actively pursuing styles aligned with their individual preferences, begin to conform to the trends and popular subjects promoted by the algorithm. For example, they may start adopting fashion styles or consumer behaviors that are popular on TikTok, even if it doesn't necessarily align with their personal aesthetic inclinations. Individuals maintain a cognizant perspective about algorithmic recommendations, exhibiting a discerning disposition, and opt to reassert control over media consumption by abstaining from making purchases and expressing negative sentiment using the "dislike" feature.

A study conducted by Wei Shoubao et al. suggests that high-quality marketing content has a dual

impact on customers. Firstly, it enhances their perception of value, and secondly, it elicits emotions such as pleasure, arousal, and a sense of control. These factors collectively influence consumers' intentions to make a purchase. This finding may provide partial insight into how college students respond to algorithmic recommendations on social media platforms. When exposed to suggested short videos, college students not only absorb the auditory information presented but also analyze the cultural metaphors and implications embedded within the content. They actively seek out diverse styles through their purchasing behavior and make adjustments to the content recommended to them, showcasing their personal discretion in choosing what they perceive as most fitting for themselves.

The aesthetic preferences of individuals serve as indicators of their personal and societal attributes, operating on both individual spiritual and socio-cultural dimensions [14]. There is an inherent and reciprocal association between personal preferences and societal preferences. The concept of individual taste seeks to surpass the limitations of personal experience and gravitates towards social interaction, so transforming taste into a vehicle for aesthetic communication. The influence of common paradigms and universal norms in social taste significantly shapes the formation and progression of individual taste. The Soviet aesthetician Burov expressed the relationship between social and personal taste as follows: on the one hand, he believed that the growth of personal taste is influenced by the social environment; on the other hand, after the growth of personal taste, it "becomes a positive transforming force, which in the end completely changes the social taste".[15] We can regard the development of aesthetic taste in the relationship between individuals and groups as an active and dynamic process closely connected with the social context, and re-domestication plays an important role in it.

5.2. Re-domesticate media: a way to fight against comparison anxiety

The choice to re-domesticate the media is a rebellion against the more anxiety-inducing aspects of society. During the course of the interviews, a consistent phenomenon was seen. The social comparison on TikTok induces attractiveness anxiety among certain female college students. The individuals will opt to "re-domesticate" the media in order to more effectively align it with their personal requirements, confront their authentic selves, and alleviate their feelings of anxiousness.

During the interview, I established a communication platform on WeChat, where LTY expressed, "Of course, I compare myself with people who are better than me, and sometimes I am quite envious. But I'm very disgusted by the conflicting emotions in my heart, that is to say, I will be anxious from time to time. Then I would search for something suitable for me according to the keywords of my body shape, and then the content that pushed to me also made me feel more comfortable". Upon the completion of her task, YYY and several other students also conveyed their profound acknowledgment.

Social comparison, as a form of spontaneous comparative activity, is a prevalent occurrence within the realm of human social interactions [16]. Several researches have indicated that individuals engaging in social media browsing have the propensity to develop a benchmark for self-assessment through association with the information presented in their surroundings and subsequent comparisons with their own attributes. This phenomenon leads to the occurrence of spontaneous social comparison, which in turn has a direct or indirect impact on users' consumption patterns [17]. During the process of comparison, individuals may engage in upward social comparison, where they compare themselves to standards that are higher than their own level, or downward social comparison, where they compare themselves to standards that are lower than their own level. The choice of comparison object varies among users, leading to different patterns of comparison [18].

The act of perusing the content shared by unfamiliar individuals on social media platforms elicits feelings of inadequacy among users, intensifies the tendency to compare oneself with others, and maybe facilitates the detrimental utilization of social media. A significant proportion of college

students engage in critical analysis of media information, expressing a sense of disillusionment towards the prevalence of comparisons seen on the internet. Regardless of the extent to which individuals familiarize themselves with short films, the content predominantly revolves about the lives, appearances, and financial statuses of others. WXT asserted that there is no necessity to introduce superfluous anxiety.

6. Conclusion

Don Ihde, a prominent philosopher in the field of technology, has put forth a conceptual framework consisting of four distinct relationships that exist between humans and technology [19]. These ties include the embodied relationship, the hermeneutic relationship, the alterity relationship, and the background relationship. Within the theory being discussed, the initial experience of significant 'algorithm anxiety' that consumers have while engaging with TikTok signifies a state of 'alterity' relationship between people and technology [20].

Based on an extensive assessment of the literature and in-depth research debates, it becomes apparent that the initial phase of domestication did not attain an optimal state. When individuals encounter profound "algorithm anxiety" as a result of the reverse domestication of TikTok, they engage in introspection and self-reflection over their initial usage behaviors. The formal initiation of the 're-domestication' phase is indicated when individuals modify their initial usage patterns. It is important to acknowledge that the behaviors of 're-domestication' discussed in this article are confined to a minority of individuals, and the restricted instances do not hold typical importance for the broader community. The generalizability of the research findings is not universal. Nevertheless, it is apparent from casual conversations that present-day university students exhibit a discerning mindset when confronted with aesthetic unease stemming from TikTok algorithms. Individuals continue to prioritize their initial choices and demonstrate this through practical application, thereby reconfiguring the algorithms to align with their personal aesthetic tastes. The process of 'redomestication' is a continuous endeavor, wherein a crucial element is the preservation of equilibrium and concordance between an individual's personal thoughts and the recommendations provided by algorithms. In this context, the term 're-domestication' might be understood as a metaphorical concept. The achievement of harmonious coexistence with technology and the empowerment of individuals through technology necessitates the continual exploration of each individual.

References

- [1] Floridi, L (2014). The Fourth Revolution: How the Infosphere is Reshaping Human Reality. OUP Oxford.
- [2] China Internet Network Information Centre. The 51st Statistical Report on Internet Development in China.(2022-02-25) http://www.cnnic.cn/gywm/xwzx/rdxw/20172017 7086/202202/t2022022 5 71724.htm.
- [3] Dai, Yuchen (2019). "Old acquaintances" and "new reunions": actor-network theory and the future of media research a theoretical-historical perspective. International Journalism (04), 68-88. doi:10.13495/j.cnki.cjjc.2019.04.004.
- [4] Haddon, L (2007). Roger Silverstone's Legacies: Domestication. New Media & Society NEW MEDIA SOC, 9, 25–32. https://doi.org/10.1177/1461444807075201
- [5] Qiu, L. N. (2021). Alienation and domestication of algorithmic recommendation in short video platforms. China Edit(04), 68-72.
- [6] Fibæk Bertel, T., & Ling, R. (2016). "It's just not that exciting anymore": The changing centrality of SMS in the everyday lives of young Danes. New Media & Society, 18(7), 1293–1309. https://doi.org/10.1177/1461444814555267
- [7] Zhu, H., & Miao, W. (2021). Should I Click the "Like" Button For My Colleague? Domesticating Social Media Affordance in the Workplace. Journal of Broadcasting & Electronic Media, 65(5), 741–760. https://doi.org/10.1080/08838151.2021.1991350
- [8] Jiang, Xiaoli & Zhong, Dibing. (2022). From "servitude to object" to "pretense to object": A study on the practice of "re-taming" short video users under the background of algorithmic anxiety. Journal of Southwest University for

- Nationalities (Humanities and Social Sciences Edition) (12), 144-152.
- [9] Huang, Y., & Miao, W. (2021). Re-domesticating social media when it becomes disruptive: Evidence from China's "super app" WeChat. Mobile Media & Communication, 9(2), 177–194. https://doi.org/10.1177/2050157920940765
- [10] Marengo, D., Longobardi, C., Fabris, M. A., & Settanni, M. (2018). Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. Computers in Human Behavior, 82, 63–69. https://doi.org/10.1016/j.chb.2018.01.003
- [11] Tian Tian. (2023). Social media and the construction of "ideal beauty" of female college students. China Youth Research (06), 94-102. doi:10.19633/j.cnki.11-2579/d.2023.0078.
- [12] Mora Matassi, Pablo J Boczkowski, Eugenia Mitchelstein. (2019). Domesticating WhatsApp: Family, Friends, Work, and Study in Everyday Communication -, n.d.
- [13] Meliawati, T., Gerald, S. C., & Aruman, A. E. (2023). The effect of social media marketing Tiktok and product quality towards purchase intention. Journal of Consumer Sciences, 8(1), 77-92.
- [14] Wong Chung Shan. (2020). On the interactive construction of individuality and sociality of aesthetic interest. Journal of Nanchang University (Humanities and Social Sciences Edition) (03), 111-118. doi:10.13764/j.cnki.ncds.2020.03.012.
- [15] Y. I. Brov (1988). Aesthetics: Problems and Controversies Methodological Principles of Aesthetic Controversy [M]. Zhang Jie, Translation. Beijing: Culture and Art Publishing House.
- [16] Asymmetric Social Comparison and Life Satisfaction in Social Networks | SpringerLink. (n.d.). Retrieved September 12, 2023, from https://link.springer.com/article/10.1007/s10902-020-00234-8
- [17] Che Cheng, Wu Guohua, Zhang Zhihong.(2023). The influence of social comparison tendency on consumers' purchasing decision Based on the perspective of emotional rational decision-making [J/OL]. China Management Science: 1-9. https://doi.org/10.16381/j.cnki.issn1003-207x.2020.1711.
- [18] LI Caina, MA Tianyu, ZHANG Hao. (2012.) Social Comparison in Social Networks: Research Status and Prospects [J]. Journal of Beijing Normal University (Social Science Edition), 2019, (6): 22-31
- [19] Don Ide. Technology and the Living World: From Eden to Earth [M]. Han Lianqing, Translation. Beijing: Peking University Press.P112
- [20] Jiang, Xiaoli & Zhong, Di Bing. (2022). From "servitude to things" to "pretending to be things": A study on the practice of "re-domestication" of short video users under the background of algorithmic anxiety. Journal of Southwest University for Nationalities (Humanities and Social Sciences Edition) (12), 144-152.