

## Postprint: An Examination of WeChat Technology from the Perspective of Reverse Domestication Theory

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### Abstract

This study examines WeChat from the theoretical perspective of “reverse domestication,” proposing three major reverse domestication characteristics arising from its development: the “freedom trap” brought about by free communication, social comparison fostering negative emotions among household users, and digital refugees and digital servants. It further argues that the essence of this “domestication” causation lies in the continuously developing technological power underpinned by technological logic, which has neglected individual value rationality, thereby offering insights for individual media usage and media technology creators.

### Full Text

#### Preamble

This study examines WeChat through the theoretical lens of “reverse domestication,” identifying three key characteristics of its reverse domestication effects: the “freedom trap” created by unfettered communication, the negative emotions bred through social comparison, and the emergence of digital refugees and digital servants. The study argues that the essence of this “domestication” lies in the continuous development of technological power supported by technological logic, which has increasingly neglected individual value rationality, thereby offering insights for both individual media users and technology creators.

This research is grounded in two social realities. The first is a theoretical reality: the domestication theory of media technology and individuals proposed by British scholar Roger Silverstone, which provides a new interpretive perspective for examining the relationship between media technology and human agency. The second is a technological reality: the continuously evolving WeChat technology is exerting persistent and penetrating influence on individual social inter-

action and daily life. The concept of “reverse domestication” derives from the “domestication theory” proposed by Silverstone and others. While emphasizing the bidirectional interactive relationship between humans and technology, this theory examines and reflects upon the “reverse domestication” effects of media technology on humans, offering a fresh perspective for interpreting the role and impact of current media technologies in reshaping human social forms [1]. As China’s largest social media platform, WeChat has reshaped our social life—we rely on it for everything from socializing and shopping to entertainment and work. WeChat has become a “media of our body.” While WeChat has undoubtedly made connections between individuals more convenient and its underlying media technology has greatly promoted social development, it has also led more people to become addicted to virtual socializing, blurring the boundaries and attributes between the “offline real self” and the “online self,” and relegating those outside WeChat technology to “digital refugees.” In this media technology revolution represented by WeChat, humans have both “domesticated” technology, aligning it with the trajectory of social development, while technology has simultaneously “reverse domesticated” humans. Therefore, this study takes WeChat as a case example and, based on the theoretical perspective of “reverse domestication,” re-examines WeChat’s development from its inception to the present. It presents the “domestication” characteristics that WeChat has brought to public social life, explores the reasons behind WeChat’s “reverse domestication” of humans, and provides a more rational perspective and insights for the public to reconsider the role that WeChat, as an increasingly indispensable social software, should play in our individual and social lives.

## 1. The Proposal of Reverse Domestication

The term “domestication” originally comes from biology, referring to conditioned reflexes based on instinctive behaviors formed through artificial training in animals, such as the behavioral relationship between humans and cats or dogs. In the field of journalism and communication, “domestication” first originated from the term “domestication” (originally “home-ization”), which refers to “media technology (such as television) entering people’s private space—the home—through the consumption process and becoming an important component of the home as a daily life scenario,” proposed by British scholar Roger Silverstone. In subsequent research, “domestication” was given broader meaning beyond television media. Silverstone thus pointed out in his work *Television and Everyday Life* that “technology, in the dual sense of television and television programs, must be ‘domesticated’ if it is to gain a place in the space of the ‘home.’” Later, Silverstone used “domestication” to express the active process through which the general public “disciplines” the usage patterns of media technology in daily life [2]. In this process, “domestication” emphasizes the “traces of use” that humans leave on objects. Between the two, individuals both create and develop media technology while also undergoing potential continuous passive changes within the media technology environment—meaning the “reverse domestication” of media technology [3]. In the discourse of Liu Qiancai

and others, “reverse domestication” abandons the standpoint of technological pessimism and escapes the trap of technological reductionism, considering both human agency and technological will as influencing factors. Taking WeChat as an example, WeChat becoming “a lifestyle” for the public is both a result of individual agency and the outcome of the “binding” of the media environment brought by WeChat on public social patterns and their gradual evolution. Additionally, reverse domestication particularly focuses on the interactive relationship between individuals and technology, placing the research emphasis on the “disciplinary traces” between humans and technology, and exploring technology’s influence on humans through these “traces.” This provides a novel and more focused perspective beyond existing technology relationship theories. Under this theory, examining specific WeChat technology makes it easier to confine its impact to the bidirectional interaction between WeChat and users, and better reveals the problems behind WeChat’s development.

## 2. The Technological Development of WeChat

Table 1 lists WeChat’s development and update process to date, filtered by social functions. In January 2011, WeChat emerged as a free messaging service capable of sending photos, gradually replacing the social function of SMS. In May of the same year, WeChat version 2.0 added voice chat functionality on top of text messaging, lowering the usage threshold. Subsequently, location-based social features such as “People Nearby” and “Drift Bottle” were launched, providing a more ideal platform for stranger socializing and becoming important social functions that helped WeChat gain a large user base since its inception. In 2012, the “Moments” function was introduced, shifting users’ life display and sharing from offline to online, enhancing user stickiness, and changing the slogan to “WeChat, a way of life.”

The evolution from versions 1.0 to 8.0.14 demonstrates a clear trajectory. Version 1.0 served as a “notification tool”—it would notify you on your phone when you received offline QQ messages, QQ emails, or Weibo private messages. Versions 2.0 and 3.0 marked WeChat’s shift toward “mobile social networking,” continuously adding social attributes and gradually attracting global users. Starting from WeChat 4.0, the platform began to take shape, with Moments, Official Accounts, real-time walkie-talkie, and location navigation strengthening WeChat’s group functions and enhancing user stickiness. From version 5.0 onward, WeChat began focusing on users’ daily life experiences, creating online life details and seamless integration between online and offline. The launch of the Mini Program in version 6.5 enabled WeChat to run various APP functions, achieving cross-platform social interaction. Version 7.0 marked the arrival of video blogs (vlogs), upgrading WeChat Moments from text and images to short videos and live streaming.

In 2013, WeChat 5.0 added WeChat Pay and the Scan function, beginning to enter the realm of public life consumption and creating an inseparable connection between user groups and WeChat. Non-user groups began to show signs of

being left behind in the digital age, subsequently giving rise to entertainment and consumption functions such as “WeChat Red Envelopes,” “Red Envelope Snatching,” and “Red Envelope Chain Games.” In 2016, the Mini Program function was launched, enabling platform-style operations and embedding life functions such as entertainment games, consumption payments, express services, and office work. In 2018, the platform introduced short video functions in vlog form, allowing users to record life through short videos and achieve social interaction through likes, shares, and comments. In the sequence of technical updates listed in Table 1, on the one hand, it reflects each technological strengthening of WeChat’s “social” function, providing users with faster and more convenient experiences; on the other hand, under the scrutiny of “domestication,” it also reveals the potential “reverse domestication” that each WeChat update may produce on users.

WeChat’s evolution from a simple messaging notification tool to a cross-platform mobile social function in the era of intelligent media relies on the development and updating of digital and media technologies in the intelligent media era. In this process, social subjects create and develop media technology, using it as a life tool to shape their lives, while media technology, as a new productive force, influences this shaping process while reconstructing the social environment—namely, the “domestication” and “reverse domestication” between technology and humans. Within this theoretical and technological context, this article explores the “reverse domestication” phenomena that WeChat’s development has created for individuals.

### 3. Characteristics of WeChat’s Reverse Domestication

This study’s examination of WeChat’s reverse domestication characteristics adopts the theoretical perspective of “reverse domestication” and focuses on WeChat’s social attributes. From this perspective, while WeChat’s development has brought users good social experiences and life convenience, it has also created a “virtual prison” for user interaction. This perspective neither adopts a completely pessimistic view of technological development nor loses sight of individual agency in the face of technology. Additionally, the third point below is proposed based on the macro-environment of WeChat’s development, recognizing both the powerful force brought by technological development and its inevitable consequences.

#### (1) Free Interaction Brings a “Freedom Trap”

As a social software entering public life, WeChat broke traditional social patterns, transcended spatiotemporal limitations, created a virtual social platform, and provided an ideal platform for users to freely access information and share and display themselves, offering great social freedom. However, this approach of breaking spatiotemporal constraints and fragmenting users’ time, while providing technological freedom, also binds users to fragmented social interactions,

creating dependency on WeChat socializing. As one scholar notes, “This seemingly free communication method that breaks spatiotemporal barriers and allows unrestricted exchange has deeply trapped humans within it without their awareness” [4]. From its initial free photo-sending function to today’s comprehensive social functions supporting voice, images, text, and video, WeChat’s technology has continuously penetrated users’ offline life scenarios, creating and replicating a completely virtual online social platform. This has developed more online and offline social relationships for users, continuously superimposing them, and placing users in “an inescapable network of various circles and relationships of various natures” [5].

## **(2) Social Comparison Breeds and Intensifies Negative User Emotions**

Yang Zhuyuan and Hao Chunmei argue in their research that the breeding and intensification of social comparison are deeply influenced by modern society and social media [6]. In contemporary society, individual self-identity has shifted from “traditional external identity-based self-identification” to “internal reflective self-identification.” The self-consciousness constructed by individuals through internal reflection is not merely an internal occurrence but also permeated by others’ evaluations—it is the result of the alignment between “self-declaration” and “others’ evaluation.” WeChat provides the technical conditions for interaction and communication between users. For instance, Moments has become an ideal platform for users to display self-impression and obtain likes and comments from others. In this platform, sharing and commenting among users create a social atmosphere of “sharing is existing.” Individuals perform “self-presentation” through Moments to gain others’ attention and constantly adjust their “performance” through feedback on their “self-presentation.” In this process, the social platform becomes a “panopticon,” where each individual simultaneously becomes both the “guard” and the “prisoner” in the “prison.” Both parties are in constant interaction and comparison through their respective “performances,” which keeps individuals in a state of constant anxiety, loneliness, and oppression, intensified through the continuous strengthening and superimposition of online social relationships.

## **(3) Digital Refugees and Digital Servants Under WeChat**

In current research literature, “digital refugees” typically refer to elderly populations born before the digital age who are excluded from digital society due to age [7]. According to the 47th “Statistical Report on China’s Internet Development” released by the China Internet Network Information Center (CNNIC), as of December 2020, China’s internet user population reached 989 million, with individuals aged 60 and above being the main group of non-users, accounting for 46.0% of the total non-user population—27.9 percentage points higher than the proportion of the national population aged 60 and above. Tencent’s data shows that among WeChat’s nearly 1.2 billion users, young users aged 18 to 35 account for 86.2%, indicating that the elderly population is excluded from

WeChat's coverage. This manifestation is evident in two aspects: first, in the family life environment, when young individuals are immersed in WeChat's "various circles," elderly family members are undoubtedly excluded from this social scenario and fall into loneliness; second, the emergence of WeChat Pay means that after individuals' social lives, their consumption lives have also been incorporated into technology's scope. Faced with WeChat's nearly 1.2 billion user base, WeChat Pay has covered all aspects of social life. When more and more QR codes and Scan functions appear in public communities such as buses, supermarkets, markets, and banks, groups outside WeChat truly become "digital refugees" in this technological revolution.

The concept of "digital servants" is proposed based on "digital natives." "Digital natives," first used by American education writer Marc Prensky in 2001, refers to people who grew up in the information age and have been familiar with digital technology and devices since childhood [8]. In this category, the current generation of post-90s and post-00s can be included as "digital natives." "Digital servants," however, emphasizes the transformation of the relationship between humans and technology. Christopher Schafer, a professor at Loyola University New Orleans, pointed out in his article "Today's College Students Are Not Digital Natives, But Digital Servants" that the relationship between individuals and digital technology has shifted from digital technology serving humans to humans serving technology. This provides a new perspective for examining reverse domestication characteristics under WeChat. As WeChat technology penetrates deeper into individuals' social lives, consumption, shopping, learning, and work, individuals increasingly rely on WeChat to complete necessities of life and work. For example, students receive large amounts of information from schools daily through WeChat, and office workers receive work information through WeChat. In this process, the boundaries between strong and weak social circles on WeChat have become increasingly blurred, and individuals are forced to accept the "invasion" of massive amounts of public domain information into their private domain. They have transformed from initial sharers to passive cooperators bound by technology, becoming "digital servants" who passively cater to technology.

#### 4. Attribution of WeChat's Reverse Domestication

Regarding the attribution of WeChat's reverse domestication, technological determinism emphasizes the powerful dominance of technological will and its alienating force over humans, while social determinism argues that the behavioral and psychological alienation individuals experience when using technology results from not maintaining proper boundaries. Both technological viewpoints exhibit absolutist tendencies toward either technology or human subjects. Within the reverse domestication framework, technology's domestication of humans emerges from the bidirectional interaction between individuals and media technology, where humans and technology are interdependent. This includes both the inherent logic of technology itself and the active agency individuals exert when

using technology.

### **(1) Driven by Technological Will and Logic**

WeChat's development represents the development of media technology, and its underlying technological will and inherent logic require users to actively make changes. From its initial free photo-sending application to today's mobile social software supporting voice and video functions, each step has compelled users to actively adapt to its technological changes under the support of technological logic. For instance, the emergence of functions such as Moments, Red Envelopes, Group Chats, and Scan has developed through users' usage and adaptation. Simultaneously, users' thinking patterns and living habits have also been subtly changed, making them "active enablers" of its will as technology changes and reshapes the world [9].

### **(2) Spiritual Dependence Under "Non-purposeful Discipline"**

As a tool-like existence, media has increasingly become an indispensable intermediary in people's production and daily lives, sometimes even becoming an end in itself, as people gradually develop certain non-purposeful spiritual dependencies on media [10]. When American sociologist Bernard Berelson studied newspaper audiences, he pointed out that reading the newspaper itself was also the purpose of people's reading. This assertion essentially reveals two attributes of the relationship between humans and media: "purposiveness" and "non-purposefulness," or humans' spiritual dependence on media. Currently, WeChat has penetrated all aspects of our lives. When we open WeChat while riding the subway, upon waking up, or take a final look at WeChat before sleep, these have become our daily "non-purposeful" contacts and uses of WeChat. This contact and use has become an end in itself and, under the "domestication" framework, has become the "non-purposeful discipline" that media technology imprints on individuals, gradually integrating into our lives and forming habits. These habits are essentially a form of spiritual dependence, cloaked in the difficult-to-recognize guise of "non-purposefulness."

### **(3) Neglecting "Value Rationality" Behind "Instrumental Rationality"**

The digital technology era is an era of instrumental rationality, where technology, relying on its powerful internal logic and will, increasingly occupies individuals' lives, and individuals increasingly exhibit characteristics of reverse domestication by technology during this process. WeChat uses data technology to create detailed user profiles and achieve precise push notifications, becoming what users "love to see" and "love to use." This change is essentially the victory of instrumental rationality and the neglect of value rationality, with instrumental rationality successfully overriding value rationality to become the decisive force dominating social life. Currently, the various impacts brought by WeChat have profoundly demonstrated that "the purity of technology as a productive

force has disappeared, and all social behaviors are understood and explained according to technological logic, ultimately becoming technological behaviors” [11]. However, this force completely dominated by instrumental rationality inevitably leaves technological “traces” on different levels of individual life. For example, the emergence of “digital refugees” and “digital servants” is precisely the inevitable result brought about by technology’s rapid development while neglecting value rationality. Human power lies in values, while the power of technology as a tool is formidable. When technological power begins to completely dominate human development, humans’ “domestication” of technology reverses its course, becoming technology’s “domestication” of humans.

WeChat’s development has brought many conveniences to our social life while also creating problems. Focusing on WeChat technology itself, these problems essentially stem from the fact that the development of technological power represented by WeChat has already neglected individual value power, with its instrumental rationality completely overriding value rationality. Therefore, for media users, it is necessary not only to exert agency but also to enhance their media literacy and media usage capabilities to prevent media from “domesticating” human subjectivity. Media technology creators and developers should balance the relationship between instrumental rationality and value rationality to establish a healthy bidirectional relationship between technology and humans.

Let tools realize values, and let values remain independent of tools.

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*Note: Figure translations are in progress. See original paper for figures.*

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