

A new path of visual communication from the perspective of the metaverse — Take Liu Yexi's Internet Communication Spectacle as an Example

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Abstract. In 2021, the "Metaverse" concept became a big hit. As an exceptional media concept, the metaverse is closely related to the human sensory system, especially visual communication. Through the method of literature research and case analysis, combined with the recent publicity craze of "Liu Yexi" and from the perspective of the combination of the metaverse and short video, this paper argues that the richness and abstraction of the concept of metaverse require short video as a new form of communication. On this basis, the practical experience of "Liu Yexi" visual communication is analyzed from narrative logic, innovation leap, and visual spectacle. Then it is pointed out that the capitalization trend of artificial intelligence is the potential risk the metaverse may face in the long-term development.

1 Question raised: the theoretical logic of visual communication in the metaverse perspective

The concept of "metaverse" first originated from the cyber world constructed by American fantasy writer Stephen Stephenson in the science fiction novel *Avalanche* in the 1990s. In the novel, Stephenson sees the imaginary metaverse as a kind of open virtual space parallel to the physical space: "a computer-generated world, which the computer depicts on his eyepiece and sends sound into his headphones."^[1] Since the concept's inception, the metaverse has been inextricably linked with the human sensory system as a unique medium conception.

On October 28, 2021, Facebook President Mark Zuckerberg announced at an annual conference focusing on augmented reality (AR) and virtual reality (VR) that Facebook would change its name to "Meta" (prefix of metaverse), marking the international social media giant in the field of metaverse opened a primary strategic layout, a time in the world detonated on the topic of "metaverse" heat.

Based on people's visual experience, the metaverse is a transcendence of the natural world and its sensory experience. It not only deepens the connotation of visual communication and broadens people's cognitive boundary of vision but also causes a considerable change in the future media field, arousing attention and hot discussion from all walks of life.

From the current academic research process, scholars

in relevant fields at home and abroad are highly concerned about and actively respond to the related concepts and fundamental propositions of the metaverse, and the "metaverse" and its extension gradually show a trend of migration from the social hot spot to the academic hot spot. As early as the 1960s, British anthropologist Gregory Bateson proposed the concept of meta-communication. Based on his comprehensive research in anthropology, linguistics, psychology, information theory, cybernetics, and other multidisciplinary fields, he believed that communication is far from simple information in the sense of the text. "Human linguistic communication can and always operates on many opposing levels of abstraction"^[2] and then defines the two aspects of meta-communication.^[3] Professor Yu Guoming of Beijing Normal University believes that the birth of the "metaverse" marks the beginning of the future form of Internet evolution.^[4] The emergence of the metaverse can be understood as the process of humans constantly breaking through the boundary of the natural world "outwards" and moving towards greater freedom with the upgrading and iteration of media. On this basis, it also puts forward the prospect of the "inward" development of media in the future and the construction of a "mind world" by human beings themselves. He also believes that the core of the rise of the metaverse concept lies in that the return of communication power is the fundamental logic of media evolution in the digital age, and human beings are the most primitive and core media.^[5] Professor Hu Yong from Peking University proposed, based on rethinking the concept of meta-media, that, like almost all meta-media, metaverse, as a comprehensive medium, reduces the "former mainstream

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media" that occupied the dominant position in human society to secondary media and subordinate media.^[6] Moreover, from four aspects of context-based consensus communication, voice-based speech communication, avatar-based reflexive communication, and environment-based multi-task communication, this paper discusses the new turn that the metaverse will bring to future communication.

Based on this, this paper takes the metaverse as the theoretical perspective, combines the literature research and case analysis methods, and carries out a literature search for "metaverse" and related keywords through CNKI, Web of Science (WOS), and other databases. Based on clarifying the fundamental theoretical propositions of the metaverse and future visual communication, and further combining with the recently concerned "Liu Yexi" event, this paper analyzes how such a wonder of Internet communication provides a new thinking path for future visual communication in the metaverse perspective.

2 Concept interpretation: Liu Yexi, under the trend of the metaverse

On October 31, 2021, the TikTok account "Liu Yexi" released a concept video lasting 2 minutes and 11 seconds. Liu, a virtual character with Chinese-style makeup, appeared in public for the first time.

At the beginning of the video, the camera zooms in and a woman (Liu) dressed in a Chinese-style red dress is dressing up in front of a dressing table. The first thing people see is her back. At this point, the camera suddenly panned to a crowd of ordinary people behind the woman looking to take photos. As Liu turns around, a young boy steps forward from the noisy crowd and asks the mystery woman in front of him, on behalf of the public, questions such as "Your makeup is ugly" and "Are you human after all?".

As of December 30, 2021, in less than two months, Liu Yexi's TikTok account has released five videos with similar styles and distinct themes, with a cumulative number of 8.06 million fans and 18.3 million likes, among which the first video has received nearly 3.6 million likes and occupied many hot topics in the hot search list of Douyin continuously within one week—generating extremely high Internet popularity.

Liang Zikang, the head of the team behind Liu Yexi and the CEO of Chuang One Technology, said in an interview that Liu Yexi, wearing eyeliner, eyeshadow, lipstick, long hair and waist, dressed in ancient style and elegant, both actual and mysterious national style image, is a virtual beauty KOL born after three years of technical accumulation of the team and carrying the concept of the universe.^[7] The behind-the-scenes team gave Liu Yexi the identity of a "virtual beauty master who can catch monsters" and can interact with people in the real world, such as can perceive people's language, communicating with people, body contact, and then judging human behavior with the cognitive rules and civilization of their world. In the virtual world built by Liu, human beings coexist with themselves in two parallel and independent

dimensions of time and space. As video viewers, most users can be attracted by the story of the interaction between the two worlds presented in the video. This constitutes a virtual space -- the metaverse, which can not only project the real world but also be independent of the natural world, with a great sense of immersion and experience.

2.1 Short video form fits the primary trend of future visual communication

In the current communication environment of redundant information, people live in an era of mass information congestion and visual fatigue. "Our eyeballs have never been so busy and tired as today. On the one hand, visual needs and visual desires are constantly climbing. The desire to see has never been so strong as today; On the other hand, the highly visual and mediatization of contemporary culture has provided us with more possibilities and higher quality and more attractive images for viewing."^[8] In this context, as an innovative media with rapid development in the era of mobile Internet, the short video is characterized by its more common technical basis, lower production threshold, more diversified scene adaptation, more direct and rapid emotional arousal, more accessible user cost, and easier to transform social capital.^[9] In the future, for an extended period, it will maintain the vigorous vitality from "volcanic eruption" to "long stream of water". According to the 48th Statistical Report on Internet Development in China released by China Internet Network Information Center (CNNIC) in August 2021, as of June 2021, the number of short video users in China was 888 million, an increase of 14.4 million compared with December 2020, accounting for 87.8% of the total netizens. Under the hot tuyere of the current metaverse, the transmission form of short video provides the primary development conditions and sufficient imagination space for future visual communication.

Liu Yexi's explosive popularity reflects some commonalities of short video communication forms and presents characteristics different from traditional short videos. Most short video creators will choose the content push strategy of regularly updating and accelerating topics' popularity in the short video platform focusing on traffic and rapid iteration. However, different from the traditional Internet celebrity IP model that constantly updates around the same world view, "Liu Yexi is another set of gameplays", users can hardly see Liu Yexi's continuous and regular updates, even as a "metaverse" character Liu Yexi will not appear in his video alone. She is more like a mother universe and may appear in someone else's child universe.^[10] For example, on November 27 this year, Liu Yexi released a video linkage with "Yucatan", another virtual IP owned by One Technology, connecting two characters in the metaverse through short video narration; This video makes "Huihui Zhou" in the real world and Liu Yexi in the metaverse form a correlation in the plot. Using the core concept of beauty, the video narrative conveys the "unknown full picture, no comment", which involves social morality, projects practical issues, and arouses a high degree of discussion among netizens.

2.2 The richness and abstractness of the connotation of "metaverse" call for a new form of communication

The relationship between technology and the virtual world has long attracted attention from all walks of life. As early as 2017, foreign scholars proposed from the perspective of computer technology development that there is no universally accepted definition of "virtual world" in academia and industry. The progress of network technology, the development of mobile Internet, and the rise of distributed computing prompt people to reflect on whether the current theoretical and technical framework can support the "virtual world" in the concept.^[11] This year, the concept of "metaverse" suddenly became popular. The richness and abstractness of its connotation once again prompted people to think about the intrinsic relationship between the metaverse, media, and forms of communication.

The evolution and development of the metaverse cannot be separated from the transformation of the media. The earliest metaverse appeared in the literature (science fiction *Avalanche*), and the development of technology promotes the emergence of new media. The rise and innovation of electronic games have enriched the forms of presentation of the metaverse, such as the popular *Sandbox* game in recent years, which is an entire virtual world.^[12] What will be the following form of communication in the metaverse from text to literature, from computer to video games? In the case of Liu Yexi's communication, from the very beginning, the creative team not only created a single virtual IP like Liu Yexi but also gave it a unique thought, emotion, and behavior pattern that is different from human society, and thus constructed a highly developed virtual world that blends with the natural world and is independent of each other. In this world, people in real life socialize and interact with a surreal digital surrogate named Liu Yexi, completing the plot narration of short videos in the process of interaction and ultimately giving rise to a virtual civilization that is both mapped to and independent of the real world.^[12] From text to literature, from computer to video games, the emergence of Liu Yexi provides a new possibility to express the rich and abstract connotation of the "metaverse" in short videos.

2.3 The application of advanced technology and the frontiers of theory make the visual communication of the "metaverse" possible

Visual technology is an essential carrier of communication activities. "It is some tools and practices that can produce or reproduce visual information for human eyes".^[13] The landing process from concept to reality of the metaverse is also a process of the constant evolution of communication technology. With the continuous development and maturity of new communication technologies such as AR, VR, 5G, and cloud computing, the metaverse also has a greater possibility to gradually develop towards the direction of reality, platform, and even industrialization through the iterative upgrading of

immersion, participation, and sustainability.

The popularization of mobile terminal equipment, the real-time signal transmission, and the precision and intelligence of algorithm recommendation together reduce the production and transmission cost of image and video information, big data, cloud computing, 5G, VR/AR, and other technologies drive the information transmission to "visualization + mobile screen media + immersive experience".^[14] According to the production team behind the scenes, Liu Yexi is a 2.5-dimensional image design between the two-dimensional animation image and the three-dimensional real-world character image. The final landing molding is done through high-precision original painting design, highly realistic 3D modeling, the import of a high-level virtual human engine, high-precision animation capture, and highly exquisite frame modification rendering. In this context, Liu Yexi's explosive popularity proves the necessity and feasibility of developing visual technology to explain the metaverse concept.

3. Phenomenon analysis: the practical experience of "Liu Yexi" visual communication

3.1 The narrative logic of "virtual and real symbiosis" in media space

French sociologist Jean Baudrillard believes that "surrealism shows a higher stage, eliminating the opposition between real and imagined. What is not real no longer remains in the dream or the transcendent. It is in the hallucinatory analog of reality."^[15] This kind of "surreal" media space, in the context of the rapid development of artificial intelligence technologies such as AR and VR, dramatically improves the degree of virtualization of the social environment and clears up the boundary between physical reality space and virtual digital space.^[14] After the characteristics of "virtual and real symbiosis" in the metaverse world enter the media space constructed by short videos, a very innovative narrative logic is represented in the communication case of Liu Yexi.

In the video update on December 12, Liu holds an oil-paper umbrella as she enters a narrow and dark grocery store, where a TV set plays a missing person notice for an 8-year-old girl. In a short sequence, Liu chases her store clerk sister into a dim factory room filled with electronics, where countless computers display brain graphics that transmit data. The 8-year-old girl is lying on a bed with a device on her head.

In just 4 minutes, the picture of cyber style and the texture of the movie version, through the continuous reversal and exciting story plot, presents a "science fiction short video" about justice, family affection, and the battle between good and evil, vividly displays the narrative logic of "symbiosis between virtual and real", which not only brings people future-oriented science fiction imagination, It also conveys the universal media motifs and values of human society.

3.2 The innovation leap of the existing visual communication logic

In most cases, innovation is not a groundbreaking breakthrough from "0" to "1" and from nothing but a new leap based on the rearrangement and combination of existing or old elements and critical inheritance.

Liu Yexi's craze relies on short videos as the essential communication medium. Its narrative framework, story logic, transitions, and special effects mostly rely on the existing relatively mature technical chassis and the Douyin platform's interactive characteristics. Through Liu Yexi's official account, users actively interact with each other, making the comment section of videos become the second communication field. While generating the heat of topic discussion, it also continuously enriched the "virtual person design" of Liu Yexi. This kind of IP to create "routine" and marketing ideas in the current communication environment is not strange. However, based on learning from various forms, methods, and logic of current visual communication, Liu Yexi's communication boom integrates characteristics and critical development and cleverly finds a communication road that fits his development stage and responds to the boom of the "metaverse" era.

3.3 Spectacle of visual consumption

In the late 1990s, American scholar Douglas Kellner, based on inherits the theory of "landscape society", proposed the theory of "media spectacle" -- media spectacle is defined as those media cultural phenomena that can reflect social values, guide modern life, and have conflicts and drama at the same time.^[16] In recent years, domestic scholars have extended and expanded the concept of "network image spectacle" based on "media spectacle" and investigated the human scene, cultural form, and thinking logic presented by network image in the process of production and communication that can stimulate and satisfy human curiosity from the aspects of production technique, text content, and appearance.^[17]

At present, the consumption operation of visual culture promotes the prevalence of the "eyeball economy". The more "new, strange, and strange" visual pictures, the easier it is to get consumers' favor and promote cultural consumption behavior. Looking at Liu Yexi's communication case, the production team first constructed narrative wonders using decentralization and intertextuality, connecting the "metaverse" space parallel to the real world with the daily life of human beings, brewing the transition of the story; Through the expression of superficial moments, impact pictures and familiar emotions, the audio-visual spectacle is constructed, and then the unique interactive properties of short video platforms break the one-way transmission of traditional images, establish interactive wonders, and finally ignite the topic heat by the concept of "metaverse" and its unique mode of communication, forming a spectacle of public opinion. Suppose the discussion of "metaverse" from all walks of life was mainly at the conceptual level before. In that case, the media spectacle

formed by Liu Yexi makes the concept of metaverse "fly into ordinary people's homes" and form a correlation with the daily life, media contact, and cultural consumption of every ordinary person.

4. Critical thinking: capitalizing concern for future visual communication

Currently, Liu Yexi is in a golden development period from concept to reality and rapid rise. In a foreseeable period, a series of subsequent works released by Liu Yexi still have great potential to induce a new wave of communication and construct broader media wonders. However, it cannot be ignored that Liu's "great popularity" also brings some worries for us to re-examine future visual communication.

From a practical point of view, Liu's initial positioning as a virtual beauty blogger is one of many in the industry. When Chinese virtual icon Ling Ling brought Gucci lipstick, consumers questioned the authenticity and credibility of her experience. When virtual IP is combined with commercial consumption, the characters in the virtual world cannot truly experience and consume the product, which is essentially contrary to the value expectation of consumers for a long time to "bring the goods and host the broadcast".

In the long run, the technology capitalization trend is a more alarming phenomenon. The biggest investor behind Liu is China Win Capital, an investment giant with over 100 billion yuan in assets. The three years of technology accumulation that Liu has experienced also shows that advanced visual communication technology and its application must be connected to the mass operation of capital behind it. Some scholars have long expressed concerns about the intellectualization of capital. The capital intervention will make artificial intelligence appear as compulsory progress and become the memory to absorb and extract human spiritual labor.^[18] From this sense, no matter the producer, transmitter, or viewer of Liu Nighxi, there seems to be a risk of becoming a "labor machine" under the pressure of capital. When Liu Yexi gains a large wave of capital and traffic through the open new media platform, will Douyin, as a content production platform for "grassroots" creators, welcome a batch of capital players from now on? In this context, where will ordinary content producers and consumers go from here? The jury is still out.

5. Conclusions

Based on the research background of future-oriented visual communication from the perspective of the metaverse, combined with the wonders of network image caused by Liu Yexi, this paper holds that the communication form of the short video is in line with the primary trend of future visual communication under the concept of "metaverse". It analyzes Liu's practical experience in visual communication from three aspects: narrative logic, innovation leap, and visual spectacle. Finally, from the perspective of future development, the

capitalization trend of artificial intelligence is the ethical controversy and moral hazard that the metaverse visual communication represented by Liu Yexi may face in the future.

However, as the concept of "metaverse" is still in its infancy in the current academic research at home and abroad, the available literature and empirical research are relatively weak, which also leads to a weak link in the theoretical logic of this paper. The theoretical understanding and practical experience of the "metaverse" must be further summarized.

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