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An Investigation into the Relationship between Metaverse Usage Patterns and Cultural Tastes: A Study of Avatar Formation among Generation Z

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Abstract

The metaverse is an emerging interactive domain that enables people to participate in an array of activities utilizing cutting-edge technologies. Generation Z perceives no substantial distinction between their virtual and actual identities, regarding the virtual world as an extension of reality. As an attempt to apply Bourdieu's theory of cultural taste and cultural capital to the area of the metaverse avatar, investigates the impact of users' cultural tastes on the avatars they create and experience in the metaverse. The research employed both focus group interviews and individual in-depth interviews with users of Generation Z.

The study demonstrated that Generation Z users exhibit unrestricted engagement in the metaverse, although their behavior is significantly affected by their economic situation. One's cultural tastes, influenced by diverse interactions with their parents, greatly impact how they engage in cultural activities in the metaverse. Three categories were identified from the perception of avatars: Idealized Self-Representation Avatars, Atypical Self-Representation Avatars, and Integrated Self-Representation Avatars. Perceiving avatars as an extension of the self was associated with higher cultural capital. Participants held divergent perspectives on the metaverse, with certain individuals regarding it as a realm of imagination or a limitless arena for activities.

Keywords: Metaverse, Cultural Taste, Avatar, Generation

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1. Introduction

At present, the metaverse is gaining attention as a concept of an expanded reality that is not a spatial entity apart from reality. This has become feasible as a result of the widespread use of smartphones and enhanced connectivity. Individuals can engage in unrestricted communication with others at anytime and anywhere, facilitating interactivity in the metaverse. Furthermore, thanks to technological advances, avatars have evolved into an expression of an individual, offering users a wide range of options with regard to physical appearance, personality traits, backgrounds, and racial identity.

Generation Z (Gen Z) is a significant demographic that extensively engages with the metaverse. They actively take part in the metaverse as avatars, representing an extended version of themselves that is strongly influenced by digital elements. The activities and experiences they engage in in the metaverse are comparable to those in reality.

In light of this, this study seeks to investigate, through a sociocultural perspective, the types of avatars in the metaverse that correspond to Gen Z's cultural tastes. The idea of cultural taste established by Bourdieu will be elaborated upon. Avatars in the metaverse, which are created according to individual tastes, can be considered a manifestation of their real identities through the role they play in the metaverse. Therefore, we analyze the features and appearance of avatars, taking into account the metaverse platform and the cultural tastes of individuals.

2. Literature Review

2.1 Bourdieu's Cultural Taste and Follow-up Studies

In the last 50 years, studies on cultural taste have been categorized into two major streams. The first hypothesis is Pierre Bourdieu's theory of cultural taste, which argues that an individual's tastes are not innate but are shaped by their social and economic position. According to this theory, individuals in higher social classes consume highbrow culture, while those in lower classes consume lowbrow culture. Bourdieu also proposed the idea that human behavior is not rational but is influenced by certain memories, habits, and social traditions, which he called "Habitus."

Habitus refers to the psychological tendencies that are influenced by social factors, such as education, and the different ways of life that are created through experience that lead to different Habitus. These Habitus become an individual's taste, which in turn shapes their way of life. Humans act based on embodied habits and memories that accumulate to form taste and maintain social classes, becoming a mechanism that acknowledges one's class identity [1]. Cultural taste generally exists as part of habits and is a practical aspect of an individual's daily life without personal biases.

Taste is formed, developed, and refined through socialization in childhood, interaction with cultural and educational institutions, and education, which is the most important cultural transmission format [2]. The lifestyle of modern individuals is closely related to their social background, educational capital, and cultural tastes [3]. The term "cultural taste" refers to the way in which individuals' preferences for cultural goods and practices are shaped and evaluated within social relationships as an extension of Bourdieu's work. In a democratic society that eliminates obvious social hierarchies, cultural taste serves as a significant tool for the development of social classes. [4]. An individual's taste may not necessarily stem from an intentional endeavor to develop refined or "high" taste but rather emerges as an outcome of the social class context in which they are situated. According to Bourdieu, differences in tastes

result in unintended consequences of social reproduction during daily interactions. Therefore, taste has the ability to unconsciously establish a sense of cohesion among social classes, strengthening societal divisions and operating as a privileged asset contingent upon one's social status. Individuals with more refined cultural tastes typically prefer to associate with others who share their preferences, whereas individuals with less refined cultural tastes may not fully comprehend the social implications of their choices. It is crucial to acknowledge that existing power dynamics function through subconscious mechanisms that may not immediately be evident in cultural and symbolic aspects [5].

The second hypothesis, known as the omnivore-univore hypothesis developed by Peterson [6], posits that individuals of a higher socioeconomic class possess not only a taste for high culture but also a wide-ranging and diverse appreciation for culture as a whole. As a result, the hierarchical structure of taste becomes more equalized. The most common critique of Bourdieu's theory is that it is based on a specific understanding of class and taste within the context of French culture in the 1960s and 1970s, which placed a strong emphasis on legitimacy and hierarchy. The omnivore hypothesis can be defined as a phenomenon in which individuals with higher social class, through increased living standards, expand their education. The acquisition of artistic expression through media has weakened their snobbish tendencies toward high culture, and they have become more receptive to various cultures. As a result, the elite culture has become more free and tolerant, with both the upper and middle classes embracing popular culture to a high degree.

Peterson and Kern [7] proposed several factors contributing to omnivore change, with a focus on musical taste rather than taste for other types of art. They conducted empirical research and found that the tastes of individuals with a higher social class are not markedly different from those of individuals with a lower social class. Instead, individuals with a higher social class have a taste that encompasses both traditional "highbrow" and "lowbrow" music genres, and they prefer more music genres than individuals with a lower social class. Peterson called individuals with broad taste "omnivores," and this formed the foundation for subsequent studies on his first discovery. Whereas those from lower social classes are more likely to be "univores," with narrow, exclusive tastes that are focused on one or two non-elite forms.

According to Friedman and Reeves [8], who argue that the distinction between nobility and ordinary has shifted to an elite classification system based on meritocracy, Bourdieu's theory lacks empirical evidence. They pay attention to the fact that the notion of elites is not sufficiently accurate and that the sample sizes utilized in the quantitative analysis of their cultural consumption are too small. Thus, they are represented by a wide range of options, including highly skilled professions and tertiary education. In addition, they explain that the dominant noble elite culture in the late 19th century was formed around leisure opportunities provided by land, such as shooting, hunting, horse riding, polo, and sailing, but as industrialists known as the nouveau riche began to enter upper-class society, the existing noble elites could not compete financially. Therefore, instead of distancing themselves from something special, the elites saw a broader "meritocratic turn" that sought to display their ordinariness and normality, according to Friedman and Reeves [8].

As society changes, class structure loses its influence on individual attitudes and behaviors [9], and both socioeconomic and demographic characteristics have a greater influence on individual tastes than class. Specifically, when culture advances, cultural tastes are no longer related to social status but rather are a matter of individual taste. In the meantime, Nault et al. [10] argue, through research on "snobivores," that some elites still differentiate themselves by showing refined tastes and developing continuously more expensive and sophisticated tastes. In conclusion, these studies modify but do not deny Bourdieu's theory that class-based cultural

tastes still exist. Furthermore, some researchers have argued that "conspicuous openness to diversity" serves as a means for cultural elites to distinguish themselves, replacing exclusive tastes for highbrow culture [11]. These various trends in cultural taste propose a modified content of cultural capital while maintaining Bourdieu's theory. This academic transfer and evolution of ideas is common in the fields of sociology and social theory.

2.2 Combination of Cultural Taste and Avatar: Expanded Self

In the metaverse, an individual's cultural taste is implemented through avatars, which are closely related to the real-world self in the technologically advanced era. Avatars are extensions of oneself that the user experiences in a virtual space [12]. The real-world self and the avatar are interdependent symbiotic relationships intertwined with shared experiences that influence the properties and experiences of the avatar [13]. Avatars implemented in the metaverse create a psychological sensation of experiencing the environment and virtual objects from various perspectives. This psychological sensation means that the user is unaware of the existence of the medium that intervenes in their communication environment. This sensation allows the experience of extending presence in the metaverse by recognizing other avatars and the individuals behind them [14].

An avatar is generally defined as a virtual representation of one's real ego that reflects significant features of the individual's real self [15]. Avatars are also both a "cyber surrogate" acting on behalf of the real self to access a multiuser virtual environment (MUVE) and a tool [16]. From both perspectives, the avatar can be seen as an extension of the user. In the metaverse, avatars offer their bodies and are sometimes described as works of art with technological elements that embody nonverbal elements, such as situations, gestures, and facial expressions. The avatar, representing the user's body in an MUVE, enables more effective participation in real-time experiences [13]. In today's environment, people exhibit a variety of identities (personas) while moving between virtual and real life. In the lifelogging world, which has already been classified as one of the types in the metaverse, we have already started the "avatar era" by choosing and freely engaging in activities that showcase our desired selves [17].

Sherry Turkle [18] established the concept of multiple personas in virtual space, describing the "feeling of having another self that exists only in this space." People develop numerous personalities as a result of their ability to shift themselves into various forms in virtual space [18], which ambiguities the traditional concept of self and collapses the logical framework, resulting in a complex sense of self [19]. This resulted in the early 2000s, which saw the growth of studies on multiple personalities. People began expressing themselves online through avatars as the Internet evolved, and early avatar research referred to a new self that is produced solely online and differs from the actual self (real ego) in the form of agents of self, virtual selves, and mediated selves [18]. Subsequent studies [20][21] expanded the meaning of the concept of agents of the self to refer to an ideal self that can challenge dreams and hopes that cannot be realized in reality.

In contrast, some studies [12][13][22] have suggested that avatars are formed by extending and reflecting real identity in reality without distinguishing between online and reality. Many scholars have confirmed that active interactivity exists between avatars and users not only in text-based online social environments, such as multi user domains (MUD), but also in new three-dimensional environments, such as multi user virtual environments (MUVE) with rich graphics. For instance, users often perceive a distinct sense of personal space and bodily boundaries within virtual space. Similar to real-life interactions in which people instinctively adjust their proximity to others. Users use their avatars to maintain or create distance when

they feel encroached. Conversely, if seeking to assert dominance, users may bring their avatars into close proximity with others. The spatial relationships between avatars can symbolize intimacy and camaraderie, mirroring offline social dynamics. Wolfendale [23] contends that as avatar reflects aspects of identity and self-awareness, interactions within virtual realms ought to be imbued with the same moral significance accorded to real-world relationships fulfilling similar roles.

A study comparing avatars in virtual space with the physical self in reality was carried out by Gilbert et al. [24]. Compared to the physical self, avatars were discovered to be younger and more attractive and to exhibit more favorable personality, social, and emotional attributes. Remarkably, despite the fact that several personas (called "alts" in this study) exist online, they exhibit a uniform appearance by creating and sustaining strong linkages across personas to preserve a consistent and ongoing identity in virtual space.

Lesley Procter [13] proposed the term "avatar-persona" to describe a hybrid concept of online avatars and personas, suggesting an intermediary entity navigating both real-world identity and the expansive realm of virtual space by integrating online and offline environments. The avatar-persona and the user are not separate entities but are interconnected through para-social interaction, immersion, and interaction of identities. As networked online identities are reinforced by cultural paradigms, identities become more diverse, and individuals are increasingly using avatars to express themselves. Users of media exhibit empathy and assume the perspective of a persona, thus adopting the persona's views and objectives. Users become more immersed in the virtual space and their avatar as an extended self, creating a mutually beneficial relationship between the two.

According to Klevjer [25], the phenomenon of individuals being extended through avatars is accelerated through technology. In virtual space, a user's body is represented through an avatar, and through this representation, the user's body is extended and reconnected through technology. We sometimes think we have control over virtual space because we use a keyboard, mouse, and other tools to enter it, but virtual space divides the body materially and extends it into screen space. This gives us the experience of physically interacting with virtual objects in real time, making the experience of physical contact in virtual space feel the same as in reality. Due to the aforementioned rationales, may consider the virtual space as an expanded reality. Extending Bourdieu's cultural tastes from the real world to the metaverse appears feasible, thereby broadening its significance and pertinence in academic dialogue.

2.3 Generation Z and Metaverse

The digital age has brought forth a new social scenario, giving rise to a generation called "Digital Natives" or Gen Z. When the iPhone was released in 2007, Gen Z was just 10 years old. They have gone through a continuous "odyssey" to maintain their social relationships in the online environment and to increase their experience with innovative technology and new products through social media, continuous connectivity, and entertainment and communication technology [26]. Gen Z is a major user of the metaverse and actively engages in online activities. They were born and raised with current technology, and technology is their identity [27]. To them, virtual reality (VR) is not just science fiction but rather a part of their daily lives. Their "digital fluency" is a characteristic that has grown with the advancement of technology, often connecting to virtual environments, and technology plays a significant role in shaping their identity.

Roblox, a representative metaverse platform known to have the alpha generation as its primary users in the United States, has approximately 83% of its users under the age of 25. Fortnite, the most popular online game platform in the world, has been found to have the most users

between the ages of 14 and 24. Considering the behavioral, attitudinal, and lifestyle changes of Gen Z, metaverse, with its potential to convey enhanced realism and a sense of presence, is emerging as another promising venue to meet the social demands of young generations left behind due to the decline of public events and social interactions. Metaverse is considered an extension of reality, and research suggests that metaverse platforms can provide users with various unique opportunities to develop social skills, which can enhance their confidence in offline communication and relationship maintenance [28]. Recently, metaverse platform services and activities have enabled users to accumulate experiences, such as participating in collective problem-solving with other users and supporting each other, which facilitates learning in reality through practicing social skills in virtual environments. Improved social presence in the metaverse also increases positive social skills by increasing interactions among users.

In 2006, the Acceleration Studies Foundation (ASF), an American futurist organization, divided the metaverse into four types—virtual world, mirror world, augmented reality, and lifelogging—based on its implementation space (intrinsic and extrinsic factors) and information form (augmented technology and simulation). After 17 years, metaverse technology has evolved, and several types have been integrated and linked to begin drawing a specific roadmap.

For the metaverse to become an environment similar to reality, it is important that the objects, avatars, and environment that make up the metaverse interact in response to users' reactions and actions, in addition to having high sensory reproducibility. Lee et al. [29] mentioned that eight activation technologies—extended reality, user interactivity, artificial intelligence, blockchain, computer vision, Internet of things and robotics, edge and cloud computing, and future mobile networks—and six ecosystem aspects—avatar, content creation, virtual economy, social acceptability, security, and privacy—need to be supported to enable metaverse users to continuously immerse themselves in the digital space.

However, new ethical issues, such as how to protect users from physical (collision or motion sickness in VR), psychological (trauma content), and security (visual manipulation and personal information protection) harm, have also been pointed out [30].

3. Research Question and Method

This study examines the characteristics of metaverse usage and avatar types according to the cultural tastes of metaverse users. In the metaverse, the "self" is expressed through an avatar created according to personal tastes, effectively extending one's real identity. Applying Bourdieu's theory of cultural taste and cultural capital, which explains cultural tastes in the real world to the metaverse. According to Bourdieu, in the real world, an individual's cultural tastes enable distinction. Therefore, it was posited that the cultural capital possessed by the real self and the capital possessed by the avatar in the metaverse may ultimately influence the distinction behavior of metaverse users through the forming of an organic relationship. Therefore, this study investigates these issues by proposing the following research questions:

- RQ 1: What are the cultural capital and tastes of the participants?
- RQ 2: What are the usage characteristics of the metaverse according to the participants' cultural tastes?
- RQ 3: What are the avatar types according to the participants' cultural tastes?

To achieve the research objectives, the study conducted focus group interviews (FGI) and indepth interviews (IDI). Semi-structured FGIs were performed teenagers, who most metaverse users, the study selected 40 participants who are middle and high school students and university freshmen who use metaverse platforms known as Roblox, Minecraft, and Second Life.

Before the focus group interviews, a short survey was administered. The survey inquired 1) the participant's demographic information (e.g., age and gender, pocket money, academic ability), 2) type of parent, and user's own cultural capital. To assess cultural capital, both parents' cultural capital and students' individual cultural capital were evaluated separately. Parents' cultural capital encompassed final education, occupation, ownership of cultural books, and possession of artistic works. Users' Individual cultural capital included engagement in cultural and artistic activities, participation in private cultural and arts education, and a proclivity for reading. and 3) experience of Metaverse Use.

The entire FGIs were audio-taped for transcription and data analysis. The semi-structured questionnaire for the FGI consisted of three items (**Table 1**), asking users' perceptions of metaverse usage patterns and Avatar characteristics and meanings. The researcher followed up with additional questions when the participants' responses required further information or clarification.

Table 1. Semi-Structured Interview Questionnaire

	emi-Structured Interview Questionnaire
Item	Question
Demographic Information and	· Measurement of Capital in Real-life
Capital Measurement	- Economic Capital
	- Allowance
	· Parents' Cultural Capital
	 Educational background
	- Occupation
	 Liberal arts book or artwork
	· User's own Cultural Capital
	 Activities related to culture and arts
	 Culture and Arts Private Education Experience
	 Enjoyment of reading
	- English proficiency
	 Experience of staying abroad
Major Activities in the Metaverse	· Motivation for use
(A researcher checks activities in	 Number of uses and hours of use per day/week
Metaverse)	 Usage characteristics
	- Game, Social meta, Educational purposes, etc.
	The distinction according to cultural taste
	- Differentiation strategy according to capital
	composition behavior
	- Avatar manners, attitudes, and behaviors
	- Follow for follow(F4F) way
	· Whether or not reality is expanded
	- Have you ever actually met a metaverse
	follower?
	- Have you ever met a real-life friend within the
	metaverse?

Meaning of avatars	· Avatar's appearance
(A researcher checks the avatar's	- Why does it look like this?
appearance)	- How much did you spend on your avatar?
	- Should you spend money?
	· Avatar's meaning
	- Why do you do it?
	- What's good about doing it?
	- Do you look like me in real-world?
	- Do you feel vicarious satisfaction?

A total of 40 users (21 boys and 19 girls, average age: 17.6 years), participated in the FGI and IDI. Participants had 6 ± 7 years of metaverse experience. The duration of metaverse usage demonstrated variation, with an average usage time exceeding three hours when accessing the metaverse platform.

4. Result

4.1 Cultural capital and cultural taste of metaverse users

The Cultural capital is a concept that includes various dimensions of cultural consumption patterns, including personal tastes. Individual cultural capital can be divided into acquired aspects, such as senses, language, gestures, refinement, and taste; objectified aspects, such as art works and collectibles; and institutionalized aspects, such as graduation certificates and qualifications. Cultural capital is a useful concept for understanding the relationship between an individual's taste and economic, social, and cultural structures, especially as a key concept in understanding the distinguishing acts that reveal class attributes and status. Particularly Bourdieu used taste and the highest level of education as indicators of cultural capital.

Some studies [10][31] suggest that Bourdieu's discussion of the relationship between cultural taste and class attributes is no longer valid in the postmodern era, where the hierarchy of taste is disrupted, and that it is more effective in understanding cultural taste from the perspective of individual psychological factors or lifestyle. However, this study found some interesting possibilities.

Bourdieu mentions that cultural and artistic experiences are naturally acquired and become familiar through the socialization process within homes since childhood. To bridge the cultural gap in schools, public education at the national level offers culture and arts education [32]. However, their artistic experience was not natural and embodied a lack of continuity and depth resulting in a fragmented and superficial engagement with the arts. Some of the research participants claimed to have experienced dance, ballet, Korean traditional dance, and Korean traditional music, but in reality, these experiences were afterschool activities in elementary school. Although some participants had learned instruments, such as the flute or traditional Korean instruments, in private academies, these experiences were somewhat different from artistic experiences. Research participants who showed professional cultural and artistic experiences had received professional education for more than five years and even considered applying to arts-related universities, indicating that they had received professional education for a long time.

The cultural capital of parents, such as their cultural activities or tastes, also influences their children's tastes. The influence of parents' cultural capital is stronger during adolescence [33]. Additionally, habitus deeply ingrains itself during the developmental stage. In fact, the hobbies mentioned by the research participants often closely resembled their parents' hobbies. These

tastes were found across various genres and were not limited to activities within the metaverse. The reason they could have diverse cultural tastes is interpreted as being due to experiencing various cultural experiences when they were young.

One research participant said that their hobby became playing the piano and enjoying classical music because their parents had played classical music since they were young. In this case, their hobby was formed under the influence of their family environment and their parents' cultural tastes.

Furthermore, in some cases, the research participants also engaged in hobbies with their parents' interests, and this phenomenon can be seen as the implicit transmission of their parents' cultural tastes to the participants. Previous studies have also shown that higher levels of parental education are associated with a higher probability of engaging in creative activities, such as music or literature [34]. This indicates a close relationship between parental cultural capital and the cultural capital of their children. The reason why these individuals could have similar cultural tastes to their parents is that they experienced various activities with their parents from a young age.

On the other hand, some participants showed a preference for gaming and watching TV as their cultural activities. Their parents had a high school education and worked in production jobs in factories. According to the Great British Class Survey (GBCS) conducted in the United Kingdom in 2011 [35], these participants belong to the technical middle class, which is a class that has no set preferences and is relatively culturally marginalized but has a high household income and savings rate due to the secure middle-class jobs in the three-shift system. In fact, their family environment was relatively comfortable. As the identity of the working class improved and economic capital increased, if they lacked cultural capital unconsciously transmitted from their parents or gained through educational institutions, they would form their preferences using easily accessible popular media. They were not able to enjoy various hobbies and leisure activities with their parents and accepted hobbies, such as games, as a familiar video medium that they experienced with their parents at home. It was noted that their engagement within the metaverse predominantly revolved around gaming activities. The usage of the metaverse seemed confined to gaming applications, rather than being explored for its potential in fostering innovative communication platforms and cultivating diverse cultural tastes. Conversely, a participant demonstrated a distinct affinity for the metaverse by their proficiency in computer programming, diverging from mere engagement with gaming.

After the widespread availability of the Internet, cultural consumption and artistic experiences became more popularized, and as media devices became more common, accessibility to cultural and artistic information increased, allowing individuals to acquire information for cultural consumption and to develop attitudes and perspectives for art appreciation through the Internet [4]. However, it was still found that cultural experiences and exposure vary according to the growth environment acquired from parents. This confirms that the unconscious incorporation of artistic experiences influences the reproduction mechanism of class distinctions in society.

Table 2. Interview participants' cultural taste and Parents' cultural taste

No.	Age	Cultural Taste			Using Platform
		Self	Dad	Mom	
1	15	Photo modeling	None	Reading	Z
2	14	Programming	Programming	Reading, Calligraphy	R
3	14	Game	Watching TV	None	R, M
4	15	Game	None	Making dolls	R, M
5	15	Game	None	None	Z

6	14	None	Watching TV	Watching TV	R
7	18	Game	Reading	Reading	M
8	18	Youtube	Reading	Reading	M
9	15	Baseball	Baseball	Golf	R
10	16	Listening Music	Baseball	None	R
11	17	Figure modeling	Building exploration	Photography	R
12	15	Drawing	Fishing	None	Z, M
13	14	Youtube	Golf	None	M
14	20	Socializing	Fishing	Reading	M
15	20	Playing Piano	Music	Classic Music	R, M
16	20	Drawing	Webtoon	Exercise	Z, M
17	20	Game	Webtoon	Volleyball	Z, M
18	18	Playing Music	Golf	Art Museum	M
19	18	Lego	Badminton	Movie	M
20	20	Game	Reading	Game	M
21	20	Game	Climbing	Chatting with friends	M
22	20	Youtube	Game	Reading	M
23	20	Jiu-Jitsu	Golf	None	M
24	20	Hip-hop	Golf	Golf	M
25	20	Exercise	Watching TV	Watching TV	M
26	20	Listening Music	Golf	None	M
27	20	VR	Billiards	None	VR Chat
28	20	Reading	Drawing	Listening Music	Z, M
29	17	Drawing	Drawing	Listening Music	M
30	20	Planning	Figure modeling	Chatting with friends	Z, R, M
31	18	Photography	Harvesting	Driving	Z, R, M
32	18	Playing	Fishing	Playing	M
33	17	Boxing	Climbing	Chatting with friends	R, M
34	17	Drawing	Bowling	Bowling	R, M
35	15	Reading	Golf	Studying	M
36	19	Watching Musical	Golf	Golf	Z, R, M
37	20	Game	Game	Stock	VR Chat
38	19	Youtube	Couple Date	Couple Date	M
39	14	Solving Math	Golf	Golf	M
40	14	Exercise	Golf	Golf	M

Z: Zepeto / R: Roblox / M: Minecraft

4.2 Cultural taste and avatar types

4.2.1 Idealized Self-Representation Avatar

In the idealized self-representation approach, the central function of avatars is to enhance the virtual self by implementing a more attractive and youthful physical appearance than the real self and reflecting more positive personality, social, and emotional traits within the virtual domain. Avatars are largely designed to satisfy real-life aspirations. Prior research has demonstrated that individuals tend to create avatars with appearances that are more idealized than their actual selves. Gilbert et al. [23] studied avatars in Second Life and found that participants assessed their primary avatars as more extroverted, pleasant, conscientious, openminded, and less neurotic than their physical selves. Belk [36] proposed that individuals tend to select online visual representations that are more fantastical or idealized compared to their

true selves when presenting themselves on the Internet. Moreover, a recent study demonstrated that users see their main avatars as being more socially interconnected and fulfilling than their actual identities [13]. Indeed, in this study, a significant number of participants expressed their intention to manifest behaviors in the metaverse through avatars that they were unable to do in real life. In particular, the Idealized Self-Representation Avatar Type was frequently found in participants who used Zepeto.

In Zepeto, various clothes, shoes, and accessories are particularly abundant. Zepeto shows a perceived reality that is similar to the real world, such as providing objects in a realistic form. For middle and high school student participants who are subject to many restrictions from adults, this space allows them to enjoy freedom by doing what they want, such as coloring their hair or putting on makeup. In addition, they can satisfy their desires by purchasing desired items in the metaverse at a much lower cost than in real life, which provides them with a sense of surrogate satisfaction. By decorating their own avatars reflecting their desires, they can increase their emotional satisfaction.

A few of the study's male participants used military uniforms as avatars to symbolize their desire for masculinity. This phenomenon was mainly observed among middle school male participants who, while not having experienced military life yet because of their youth, were captivated by the strong and manly image that soldiers projected.

Another participant downloaded and used the influencer version of the avatar. This participant indicated that, even in the metaverse, they wanted to use the same avatar as they did in order to feel like the influencer.

According to Turkle [18], people in virtual spaces try to realize social desires or ideals that they cannot achieve in reality, and they develop a different type of identity than their real selves. In fact, many people who are quiet and passive in reality show active conversation and behavior in the metaverse. Idealized Self-Representation Avatar Type can transform their appearances freely in the metaverse. People have been found to have a tendency to achieve satisfaction vicariously in the metaverse by embodying their regrets and desires. They can be said to form a dual identity (double self) by identifying with their avatar while establishing a separate identity [37]. Given Gen Z's daily access to the metaverse, it emerges as a robust avenue for cultural exploration. Users engage in a variety of cultural activities that transcend time and space by utilizing the embodied internet and functions mentioned by Mark Zuckerberg. Throughout the study, participants consistently demonstrated their adeptness at replicating cultural norms in the metaverse, tailoring experiences to their tastes.

4.2.2 Atypical Self-Representation Avatar

In the Atypical Self-Representation Avatar Type, the appearance of avatars can be diversified in virtual space by adopting different genders, races, and ages; this is related to Taylor's concept of "identity tourism" [38]. However, the connection between multiple personas stemming from altering one's appearance in a virtual space disconnected from reality poses challenges in maintaining a stable and continuous identity. Alternatively, when intentionally creating avatars with entirely distinct characteristics, individuals often encapsulate the limitations and vulnerabilities inherent in their real selves. Moreover, the virtual self can emerge as a completely foreign entity, departing from the fixed gender identity observed in the real world and facilitated by leveraging the inherent anonymity of the virtual space through strategic gender-swapping practices. A constraint arises from the lack of interconnection between the multiple avatars personas expressed, as individuals transform their appearances within a virtual space detached from reality. Consequently, avatars maintaining a stable and

continuous identity encounter limitations. This dynamic gives rise to a discernible sense of heterogeneity or disjunction over time, thereby presenting a conflict with the individual's real self-identity [22].

Previous studies classified these types into creative type [39], false satisfaction type [40], and bizarre self type [41]. The commonality among these types is that they express another aspect of themselves through avatars with creative and unconventional thinking rather than being confined to their own identities.

Some male participants in the study were observed to create female avatars that were beautiful enough for them to stare at their avatars reflected in virtual mirrors and to be fascinated by them. One participant stated that making an avatar that looks like a real person's face is neither amusing nor appetizing; instead, one should create a lovely female character and be content. Another participant designed the avatar's appearance to resemble soil, to the extent that it became challenging to discern whether it was soil or a human from a distance.

Atypical Self-Representation Avatar Type accomplishes several goals, including piquing people's curiosity and exciting their imaginations by simulating different facets of personal identity and exaggerating psychological issues. This type of avatar user usually exaggerates the appearance of the avatar. To create inventive, curious, and intriguing pictures, they exaggerate their mental states and reconstruct components related to their personalities. They appear to display a dual identity, or a split self, as they move between real and virtual environments and construct various spectrums using their avatars.

A shared characteristic among participants was their tastes for enjoying games within the metaverse, rather than engaging in creative pursuits independently. They encountered challenges when attempting to utilize the metaverse innovatively and experienced boredom when confronted with complex rules. Accessing the metaverse via mobile phones, they often indulged in immersive experiences for extended periods, sometimes exceeding 5 hours.

4.2.3 Integrated Self-Representation Avatar

Morawitz [12] viewed avatars as an extension of a user's self in experiencing virtual space. She expressed that people's virtual experiences are based on our physical bodies and are inseparable from reality; thus, experiencing the avatar self is as if it were their actual self in virtual space. Avatars maintain connectivity while exerting an influence on the user's real self. Therefore, the sense of "presence (the feeling of actually existing and being perceived as if others are present there)" can serve as a bridge connecting both sides of the screen.

Belk [36] also saw the discussion of extended selves becoming more active with the advent of the Internet, social media, online games, and virtual spaces. The Integrated Self-Representation Avatar extended self in the online world is formed based on our minds, bodies, material possessions, family, friends, and so on from reality. With the emergence of digital media, our self-expression has become more interesting as we continuously connect with others through various platforms, such as Instagram and WhatsApp. Although avatars tend to represent an ideal or fantasy self rather than the actual self, activities within virtual environments unveil precise personality traits corresponding to individuals' real selves, as observed by Baek [22]. Controlling avatars in digital media, such as video games and virtual worlds, sets us apart from passively watching television or movies. It is highly likely that we identify ourselves completely with these avatars for all practical purposes, indicating that they are our extended selves.

For example, Mark Zuckerberg presented a future vision by introducing Mark Z, a virtual avatar who took his place while announcing the company's rebranding from Facebook to META. Mark Z wore the same long-sleeved blue shirt that Mark Zuckerberg generally wears,

along with black slacks and white sneakers. It was Zuckerberg, a real-life expansion.

The Integrated Self-Representation Avatar Type is characterized by building and maintaining stable and "continuously" strong connections between avatars throughout the virtual space, which can be interpreted as a mirror world that moves reality to the virtual space, exhibiting metaverse characteristics. This type of avatar can be thought of as part of a mirror world that projects reality into the virtual realm and exhibits metaverse traits. The participants belonging to this category possessed a comparatively elevated degree of cultural capital and employed the metaverse in a unique and personal way. Their avatars served as both an extension of their real-life personas and a continuous medium for the participants to express themselves, often expressing more of what they felt was missing from reality.

Meanwhile, both the desire satisfaction type and the expanded self-type showed the Proteus effect. Yee and Bailenson [42] cited two experimental studies suggesting that the representation of one's transformed avatar in virtual environments affects behavior in self-expression through virtual environments. First, the participants who used more attractive avatars in immersive virtual environments disclosed more about themselves and approached others more closely than those who used less attractive avatars. Second, the participants who used taller avatars behaved much more confidently than those who used smaller avatars by observing their own behaviors and the situations in which they occurred. This indicates that the metaverse experience through avatars can influence identity in reality.

Table 3. Types and characteristics of avatars

Types of avatars	Characteristics
Idealized Self-Representation	A self to satisfy wishes in real life
Avatars	
Atypical Self-Representation	to convey imaginative ideas through amplified visuals
Avatars	
Integrated Self-Representation	Highlight the close correlation and fusion between the
Avatars	virtual and physical aspects of oneself, underscoring the
	notion that the avatar is perceived as an extension or
	essential component of the user's identity

As the metaverse environment becomes more concrete and the boundary with reality becomes more blurred, the global population using the metaverse continues to increase. Therefore, creating and adjusting avatars is expected to become an increasingly normative process. Individuals will manage orders over the identities of their avatars in a manner similar to that of a conductor leading an orchestra, and as described by Erving Goffman, the operation of the impression management of avatars is expected to become increasingly important.

The types of avatars perceived differently, depending on the cultural tastes and levels of the metaverse users, are presented in **Table 2**. First, the participants of the "Integrated Self-Representation Avatar Type" avatar tend to have highbrow cultural tastes and share the characteristic of constructing and maintaining their identity similarly in both reality and the metaverse. The "Idealized Self-Representation Avatar Type" participants expressed the desires they wanted to achieve in reality through avatars in the metaverse with intermediate cultural taste levels. On the other hand, the "Atypical Self-Representation Avatar Type" participants tended to present avatars that were unrelated to reality, appeared as exaggerated images, and had cultural tastes that were mostly mainstream. In other words, when cultural taste is mainstream, users tend to use avatars in a manner that is too estranged from reality, while participants with highbrow cultural tastes tend to utilize avatars in a way that connects both reality and the metaverse elastically rather than maintaining a fixed identity on either side.

Table 4. Cultural Taste Types of avatars

Cultural Taste	Types of avatars
Highbrow	Integrated Self-Representation Avatars
Middle	Idealized Self-Representation Avatars
Lowbrow	Atypical Self-Representation Avatars

5. Conclusion

As Gen Z uses the metaverse as a leisure space, it has become normal for them to express their tastes via avatars. The metaverse has become a natural place for people to display their multifaceted identities as extensions of their true selves and to set themselves apart from others according to the tastes ingrained in these diverse personas.

First, we identified the types of cultural capital possessed by users in the metaverse. Although the metaverse, which is used by a large number of people, seemed to have a free paradigm in which various classes, generations, genders, races, etc., could freely and equally participate according to their own will, we still observed continuous sociocultural trends and identified an underlying class structure that was not visible but influenced by economic logic. We observed that users were distinguished according to their level of cultural capital.

Second, individuals endowed with elevated levels of cultural capital exhibited a propensity to naturally cultivate refined cultural tastes, often stemming from classical education imparted by preceding generations. Conversely, those with proper economic status yet lacking in inherited cultural capital tended to gravitate towards readily accessible, mass-media-driven, or gaming-centric tastes. The symbolic reproduction of class status was evident as individuals, dubbed "Habitus," subconsciously gravitated towards preferred tastes within a spectrum of cultural offerings. While the Internet has seemingly provided a fair distribution of opportunities for acquiring cultural capital, it was observed that cultural experiences and opportunities were still biased toward a small portion of the population.

Third, individual differences were found in avatar recognition in the metaverse according to personal cultural tastes. Avatar recognition was classified into three types: "Desire-satisfaction type," in which individuals projected unfulfilled desires onto their avatars, "Idealized Self-Representation Avatars Type," in which individuals experimented with new identities unrelated to their real-life selves, and "Integrated Self-Representation Avatar Type," in which individuals recognized their avatars as an extension of themselves in reality. The participants with higher levels of cultural capital tended to recognize their avatars as an "Integrated Self-Representation Avatar Type." This group maintained an attitude of respect for each other even in the virtual world, where their faces were not exposed and utilized the metaverse creatively, not just for gaming purposes. The use of social media already has a form of distinction that can have differentiated values and meanings from other users through active actions such as revealing cultural capital in everyday life due to the need for self-expression.

In summary, the study found that the cultural capital of users in the metaverse is closely related to their social position and cultural tastes. While the metaverse appears to promote a free and equal paradigm of activity for people of all social backgrounds, there is still an underlying class structure based on the economic logic of the metaverse. Users with higher cultural capital tend to exhibit better manners, more creative use of the metaverse, and a broader range of cultural tastes and experiences. However, access to cultural experiences and opportunities tends to be skewed toward a minority of people. The study also found that the cultural tastes of Gen Z users are influenced by both their own cultural capital and that of their parents and

that their avatars tend to reflect a fluid combination of the two. In conclusion, the factors that determine cultural tastes are complex and multidimensional, involving both Bourdieu's theory of cultural capital and Peterson's omnivorousness hypothesis.

According to research, since the widespread use of the Internet, cultural and artistic experiences have become more accessible to the general public. As media devices have become more common, access to cultural and artistic information has increased, allowing people to acquire information for cultural consumption and to cultivate attitudes and perspectives for appreciating works of art through the Internet. However, it has been found that cultural experiences and perspectives vary depending on the environment in which people grow up, which is largely determined by their parents. This suggests that unconsciously acquired artistic experiences play a role in reproducing the social class structure.

This study is significant in that it takes a user-centered approach to analyze the metaverse, which has mainly been studied from a technological and industrial perspective and expands the scope of the real world into the virtual space of the metaverse from a sociocultural perspective. In particular, the study provides a three-dimensional exploration of the composition of capital and differentiation strategies through FGI and IDI with 40 members of Gen Z, who are the main users of the metaverse. However, since the participants were adolescents during their growth period, there may be some criticism of the accuracy of measuring capital and the validity of expanding real-world capital into the metaverse. Therefore, future research that includes surveys or experimental studies in addition to IDI is expected to produce more meaningful results in examining the metaverse usage behavior of Gen Z.

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