

Analysis of Metaverse Platform as a New Play Culture: Focusing on Roblox and ZEPETO*

Jeongmin Han^[0000-0002-9862-7228], Jeongyun Heo^{**} and Eunsoon You^{**[0000-0001-8827-1232]}

Kookmin University, Seoul, Republic of Korea
{jeongminhan, yuniheo}@kookmin.ac.kr
Jiwony71@gmail.com

Abstract. At the end of 2019, due to the emergence of COVID-19, individuals' outdoor activities have been restricted. Due to this phenomenon, demand for online activities has been increasing and the interaction in the metaverse environment is attracting great attention. The MZ generation and the alpha generation who are active in online activities are main users of the metaverse platform, but there is not enough research that studied the main activities of users on the metaverse yet. In this study, we observe how the MZ generation and the alpha generation utilize the metaverse and form cultures by deploying ethnography methodology. Traditional ethnography is characterized by in-depth observations of groups of individuals, recognizing the impact of historical and cultural contexts on social interactions. This has the advantage of enabling new insights through an in-depth understanding of phenomena or topics that are still perhaps only superficially understood [1].

Since the space where users of the Metaverse platform take place has been specifically a digital environment, from the perspective of digital ethnography, we selected YouTube as a platform on which the observation and research were conducted.

Keywords: Metaverse, Virtual World, MZ Generation, Alpha Generation, SNS, Roblox, Zepeto, Digital Ethnography

1 Introduction

As the untact(non-contact) era due to Covid-19 continues, interest and demand for metaverses that can be active and communicate in virtual reality are increasing [2]. This study conducts a digital ethnography study using the YouTube platform to investigate

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** Corresponding authors.

the use and culture of Roblox and ZEPETO, which are currently recognized as two of the most representative platforms of Metaverse. Ethnography is one of the methodologies for closely observing people's social interactions. In that respect, it is judged appropriate to observe metaverse users. Unlike traditional ethnography, researchers can conduct research through observation without revealing themselves in the online space, so this study used an observation method that excludes participation. This paper is structured as follows. Chapter 2 shows the introduction of metaverse and ethnography through literature research. Chapter 3 introduces ZEPETO and Roblox as platforms for observation. Chapter 4 includes the rationale for selecting YouTube for digital ethnography, selecting keywords, and extracting content accordingly. Chapter 5 shows the analysis of observations on YouTube within a specified range through derived keywords. In Chapter 6, insights are drawn according to play theory.

2 Literature review

2.1 Concept of metaverse

The term “metaverse” was first introduced in 1992 in Neal Stephenson’s science fiction novel “Snow Crash.” It is an immersive, three-dimensional virtual world that is based on the real world but has no physical limitations and enables interaction between people using avatars [3]. The metaverse acts as a virtual spatial background that enables users to engage in social, economic, and cultural activities through avatars [4]. After Stephenson’s novel appeared, the development of technology made it possible to realize the virtual world in real life, and a more complex and broader concept of the metaverse was developed [5]. An early metaverse platform “Second Life” started in 2003, and various facilities such as lecture rooms, libraries, and hospitals were built. People interacted with each other by, for example, teaching or running an election campaign [6]. Today, every user can make money with the items and content they create in the metaverse. The American singer Travis Scott held an avatar concert in April 2020 with a 12.3 million strong live audience and Gucci sells bags items on a metaverse platform. This shows the expectations and activities of individuals and companies for new markets as economic activity spreads in the metaverse.

2.2 Introduction to digital ethnography

Good ethnographies uncover tacit knowledge, referring to the largely unarticulated, contextual understandings that are manifest in routines, nods, silences, humor, postures, and gestures as well as statements about belief and values [7]. As digital media is closely related to our lives today, ethnographers have the opportunity to explore new communication phenomena that occur in various ways across online and offline spaces. “Digital ethnography” encompasses the fields of virtual ethnography, cyberspace ethnography, online ethnography, and social media/new media ethnography [8].

As a method for practicing digital ethnography, social networking sites (SNS) are very helpful in that they contain a vast amount of multimedia material about the most limited social movements or groups. Through SNS, researchers have the advantage of

being able to collect previously unavailable types of data by observing the social interactions of members in detail [9]. In ethnography, the level of interaction with the study subject depends on the intensity of the observer's participation [10]. In this study, we observe Roblox and ZEPETO users through digital ethnography using a simple observation method without direct contact between the researcher and the subject.

3 Roblox and ZEPETO as metaverse platforms

In this study, as the representative metaverse platform for observation, Roblox, where the alpha generation is known as the main user in US, and ZEPETO which has the most users of the MZ generation world widely, were selected.

Roblox launched its service in 2006, and according to ComScore (as of December 2017), it was ranked as one of the best online entertainment platforms for users under the age of 18 based on average monthly visits and usage duration. ZEPETO, launched in 2018 by Snow owned by the company Naver, has been selected as a platform with a large growth rate [11] as it is used by 20,000 cumulative global subscribers as of March 2021.

Roblox supports block-shaped avatars, and users can decorate and operate avatars and maps using the cryptocurrency, Robux. More than 50 million games can be played on the map, and anyone can design, develop, and share games through "Roblox Studio." Roblox helps users to build their own space by providing various resources for individuals to develop games (Roblox Corporation, 2021). ZEPETO supports avatars that have a human appearance, and users can decorate them using facial recognition and augmented reality functions. Users can use coins and gems as virtual currencies to decorate their avatars and maps for space. They can also explore maps of various concepts or build and share maps themselves, although ZEPETO does not support game creation with coding (as of June 2021). ZEPETO recommend trendy poses through avatars, popular maps and other crews supporting "crew classification" according to users' interests. They also support concentrated communication activities by sharing content using avatars such as My Photobooth and live streaming [12].

4 Research Method

4.1 Ethnography through Youtube

In this study, for objective indicators, an observation method through the YouTube platform was used. This is because, as digital immigrants and digital natives, generation MZ and generation alpha, who are familiar with the online environment, tend to record their activities on the metaverse and then show the results and communicate on social media [13]. We had the advantage of being able to observe the behavior for a longer time than other platforms in that we can view this activity as a video.

Space and Avatar Formation	Map, Studio, Customizing
Play Activity	Game, Challenge
Sociality	Group, Crew, Friends
Money for Activity	Robux, Coin

Fig. 1 Extraction of Keywords

A total of 10 keywords were derived from 4 perspectives by focusing on activities in the metaverse space [Fig. 1]. These keywords are services commonly provided by Roblox and ZEPETO. Basically, “map,” “studio,” and “customizing” to form a space for activities and avatars were selected as observation keywords. To observe the culture formed through play in the metaverse, we used “game” and “challenge” keywords. “Friends,” “Group (Roblox)” and “Crew (ZEPETO)” were for forming social relationships. The “game currency” required for continuous activities was additionally examined. As a name for the virtual currency, Roblox used the keyword “Roblox” and ZEPETO used the keyword “coin.”

4.2 Observation and content extraction from YouTube

YouTube Content Extraction Criteria	April 1, 2021 ~ April 10, 2021		
	Mouse scroll 19 to 20 times		
	'Relevance' criteria	Priority in titles with keywords	More than 1,000 views

Fig. 2 Criteria for extracting YouTube contents

[Fig. 2] shows the content extraction criteria established for accurate observation. The search was conducted for seven days, and the brand name of the platform was put in front of all keywords when searching. Images were counted according to the mouse scroll standard with an error range. Due to the nature of a YouTube search, the main content according to the filter is shown at the top, and when you scroll down more than a certain number of times, the overlapping video is repeated. Therefore, as a result of the above table arrangement, we observed the content mainly for “map,” which had the most content in common, “custom,” and “game,” which had a large difference in the number and ranking of videos, to derive the characteristic usage culture of Roblox and ZEPETO, respectively. Scrolling about 20 times was judged to be appropriate, and in all searches, more than one duplicate image was not counted. However, in the case of “crew” and “challenge,” which indicate groups in ZEPETO, the majority of the hits were less than 1,000 within the count range, but they were compiled together with the reasoning that it is worth research because the exchange culture unique to the platform can be observed. For an accurate comparison, Roblox’s “group” also applied the same criteria.

5 Analyze extract content

		Map	Challenge	Game	Customizing
Roblox	Count	36	11	30	16
	Rank	1	8	1	7
Zepeto	Count	35	8	15	28
	Rank	1	7	6	2

		Friends	Studio	Group	Virtual Currency
Roblox	Count	33	28	19	29
	Rank	2	5	6	4
Zepeto	Count	27	27	26	25
	Rank	3	3	4	5

Fig. 3 The number and ranking of contents that passed the search result selection criteria

As a result of the search, the number and ranking of content that has passed the selection condition are shown in Fig. 3. The characteristic usage culture of Roblox and ZEPETO was derived by observing the content of six subjects, focusing on “map,” which had the most content in common, and “custom” and “game,” which revealed a large difference in the number and ranking of videos.

Map: As a result of searching with the keyword “map,” the most related videos were observed with no significant difference between the two platforms. The reason can be explained as content that is in high demand from the point of view of content sharing and introduction because the space itself can show a lot.

First, 24 out of 36 Roblox videos were about exploring maps and playing games. Mainly, the behaviors of playing with other users, escaping together, and performing missions were found. Various maps were introduced, such as a map that destroys everything and a map that is good to deceive friends, and it can be seen that the user’s interest is focused on the properties of games or maps created so that they can be enjoyed together.

In ZEPETO also, game content in which users escape by using functions in the map was the most with 12, and there were 11 videos with map exploration and introduction properties. Through this phenomenon, it was found that, unlike Roblox, it was separated for two purposes: (1) gameplay and (2) map exploration and introduction. In (1) gameplay, ZEPETO has no game elements that users can create unless it is an official map, unlike Roblox, so the most common games using the basic “jump” function were 11 out of 12 games. (2) Map exploration and introductions mainly consisted of subjective reviews while walking around the map, and it was a typical Vlog format. These maps are mainly generated in collaboration with other brands or are official maps of high quality, so they can attract the attention of many users. Users showed the characteristic of wanting to show their individuality by visiting in costumes that matched the concept of the map or by walking around the maps they made by themselves. As a result, unlike

Roblox, which focuses on game activity and map properties, ZEPETO users are observed to visit the map for sightseeing and the map for play separately and take Vlogs to show others.

Game: In “Game,” there were 15 more Roblox videos than ZEPETO. Among them, 10 were “gameplay and review,” and the other 10 were “game recommendation” videos observed, so it can indicate that users focus on enjoying various games. In particular, a great deal of content was found that “talk and play together” or cooperate to achieve a purpose. The other five videos are content that plays situational plays while playing the game, such as “When my girlfriend is late” or “Police and Thief Role Play”. This was focused on their own activities rather than game functions in the map. Through this, it is discovered that Roblox users perceive the maps as “places for game activities” in themselves. Moreover, the fact that the metaverse space is playing a role in a new situational play is a differentiating point from existing online games.

On the other hand, only five instances were found where users enjoyed the game only on the official map opened for the game in ZEPETO. This number is much smaller than that of Roblox because ZEPETO supports a variety of play elements and functions only in the official game map, as introduced earlier. However, even if it was not an official map, individual users could be seen completing the race within the time limit on a map with many high stairs and jump elements. In addition, it was possible to observe users creating their own fun elements, such as making rules or missions, playing with other users, and playing hide-and-seek. While the expected role of maps in Roblox and ZEPETO may differ, players can find common ground in that they act as creative groups that create various “stories” on their own within the different worlds created by the producers.

Customizing: “Customizing” can be explained mainly by decorating the avatar. If Zepeto users choose concepts such as “Cherry Blossom Girl” and “Snow Fairy” and use them as a way to express themselves, it is emphasized that Roblox users “invest with Robux” and customize it. Unlike Zepeto, in the case of customized content such as “animal” and “being an insider,” the content is aimed at showing that the concept has not been set in detail and that money has been invested mainly in fashion items. As a result, ZEPETO supports various elements to change the avatar’s specific appearance as with a real person, so it is explained that users project themselves on their avatars and use them as the most effective way to express themselves. Roblox users can also decorate their avatars in a variety of ways, but it seems that the desire to show them how much they have invested in Roblox is not simply limited to customization.

Friends: In “Friends,” Roblox also had the largest number of videos of playing games with other users, so users’ attention was focused on games and interactions with other users. The main content was to play together, fight, and bear a level together. The next most popular content was the “situational play.” This encompassed planned situations such as bullying, scary friends, and selling at a department store, and users conducted role-playing with friends talking through a microphone. In ZEPETO, “drama” contents were 8 which was the most. The content was mainly about conflicts with friends in a school setting, and users can take on roles with other users and create dramas by making customs and gestures that fit the situation. Users upload each episode to YouTube like a real drama and interact with subscribers through comments. In the case of the

Analysis of Metaverse Platform as a New Play Culture:
Focusing on Roblox and ZEPETO 33

ZEPETO drama, users can see that the metaverse and SNS platform are inevitably related by making videos entirely for YouTube users. Ultimately, Roblox and ZEPETO users had in common the desire to role-play using space and show it to third parties through other platforms.

Challenge: In the case of the challenge, as stated above, even the videos with a lower number of views than the set were added up. In Roblox, “challenges that are active on the map” were the most with 6 out of 15 videos. Mostly these were challenges that map builders made for visitors and the content was all about gameplay, such as “a battle to build a ship, a successful jump, and a new record.” In content with fewer views, humorous or bragging videos such as “180-degree kick, jump only with direction keys” were found. On the other hand, ZEPETO’s challenge had a distinctly different attribute from that of Roblox.

If Roblox users mainly performed game-related challenges on the map, ZEPETO users posted the most mission videos such as short dances or acting through avatars along with background music like Tiktok. It was a challenge using avatars to dance to popular songs or notes, such as “expression challenge,” “cat arigato,” and “any song challenge,” or using new poses that are officially supported. That being the case, users do the challenge alone or with other users with their own avatars and post them on the feed. Most of the contents had less than the number of views selected for this paper, but since ZEPETO itself not only induces various challenges, but also supports self-sharing within the platform, it is possible to create, share, and communicate sufficiently within the platform. Thus, if Roblox shows results focused on the game as well as the challenge, ZEPETO creates content through collaboration within the community, and it can be confirmed that it leads to communication such as to click hearts or commenting through the created creations.

Group / Crew: In “Group” and “Crew,” there were many videos on Roblox showing how to open a group and how to create a group fund, and at the same time, the number of views was high. In this case, there was a lot of tutorial content that showed how to use less Robux or for free.

On the other hand, ZEPETO had the most content created by users in collaboration with the crew. There were many videos and ZEPETO dramas that imitate artists’ music videos in the ZEPETO version, and the rest were promotional videos such as individuals recruiting new crews or introducing crew members.

Unlike ZEPETO, Roblox users have to use Robux to create a group, but they appear to want to create or join a group for the game. On the other hand, it seems that ZEPETO users create or reprocess and share their works in their own way with the crew the most, showing that users have diverse ways to present themselves, and collaboration has become a natural culture. As a result, Roblox shows that users’ attention is focused on “games,” “groups,” and “play with other users,” whereas ZEPETO stands out for sharing and communicating various works made with avatars rather than “games”. It can be seen as a culture that users of both platforms use YouTube to film and show their actions.

6 Insights

The biggest commonality between Roblox and ZEPETO is that players create their own various “stories” by creating games such as “creating and performing missions” and “role-playing” in different worlds created by the creators. As a creative group, they try to show their play itself as a creation to others through other platforms. In the metaverse, users project themselves onto their avatars to express themselves in various ways and compete through this. In the end, this act allowed the metaverse to exist as a new play space and at the same time established itself as a culture within the metaverse. Johan Huizinga stated that culture is “to be played” in the first place, and that play serves as a foundation for the existence of culture [14].

Caillois has divided play activities into four main categories: competition (agon), simulation (mimicry), dizziness (ilinx), and chance (alea) [15] and this includes the act of showing their own games through SNS. Regarding games in the metaverse, content such as “reaching the destination first through jumping” and “escape first” can be viewed as competition (agon). Also, the desire to receive a lot of attention by uploading one’s activities, such as customizing a challenge, directly to SNS, is a competition. The simulation (mimicry) is a basic property and the biggest characteristic of the metaverse because the metaverse is a new world that imitates the real world as it is through various virtual objects. Users create play by freely following various memes and missions or role-playing here, role-playing according to the concept of space, and improvising the story in a situation where no lines are set at all. It also has the property of being “accidental” (alea). Vertigo (Ilinx) means entering into a state of convulsions, fainting (excitement) or terrified (quivering) that temporarily destroys perceptual stability and bewilders the sense of reality [16]. The obstacle-climbing activity on the “Jump Map” that users on both platforms enjoy in common can be classified as “Ilinx,” just like feeling dizzy while riding a fairground ride. This also applies to sharing your creations on social media. All of these actions correspond to all four items in that they upload their appearance using SNS. Therefore, the metaverse is welcomed as a new playground for the MZ and alpha generations in that it enables play activities as they are in real life.

Combining the behaviors of users on both platforms through each keyword, the difference between Roblox and ZEPETO is that Roblox has developed into a game-focused communication and ZEPETO majors in social communication through creation and collaboration. This is evident in the group of Roblox and Crew (which means group) of ZEPETO. In the case of Crew (ZEPETO), the relationship between content creation and collaboration is very close, therefore, the community for content creation could be activated. On the other hand, it can be seen that the two platforms have distinctly different characteristics in that the group (Roblox) has an active community for performing “play,” including missions and games.

The metaverse is an evolved form of online game [17]. In terms of the connection between reality and virtuality, the metaverse has a stronger connection between reality and virtuality. The form of participation of metaverse users (for example, content production and consumption methods) is also different from before. Users compete in “catching a tag” and “jumping quickly” just like in real life, making it more enjoyable to play. An advanced form is attempted in the metaverse. Users can participate more

freely than in existing online games by the way they create their own stories, not narratives, such as role-playing and making dramas using space. In addition, the level of activity within the metaverse continues to rise in the sense that a new culture is created by projecting oneself onto the avatar and sharing the act of playing.

7 Conclusions and Future Studies

This study confirmed that users' activities through the metaverse platform constituted the metaverse's own culture through play. In addition, when looking at the usage status of the two platforms, the difference between ZEPETO and Roblox was that ZEPETO had different personalities in the form of "Social communication" and Roblox in the form of "Game," which enabled different communities. What we found on both platforms was that users wanted to create their own play and share what they were doing. As a result of examining these actions based on Caillois' play theory, it was revealed that the metaverse has value and meaning as a new play space. As a study limitation, we used YouTube as a method to investigate the behavior of metaverse users, but YouTube was unable to have "observe participation." However, to know and understand the cultural enjoyment of the MZ generation, a method for observing it from various angles must be devised. In the next study, we plan to observe platform users directly and within the metaverse and conduct user interviews in this regard.

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