

A Bible Didactical Approach to Bibliodrama on the Metaverse Platforms

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Abstract

The purpose of this study is to explore the implementation of Bibliodrama on the metaverse platforms. In other words, to create interesting and effective Bible education for modern learners, this study took a didactical approach to the implementation of Bibliodrama through the metaverse. The main reason to be enthusiastic about using the metaverse for education is because users, who have been only content consumers, now able to experience and create values. As a Bible didactical approach, Bibliodrama is an emphatical and communicative learning method in the form of role play. Bibliodrama seeks to interact with the world of the learner and the world of the Bible through improvisational acting, to study the Bible. Through the Bible didactical approach, the meeting of Bibliodrama and the metaverse can have a positive effect on modern learners, in terms of improving learning environment and, above all else, increasing learning interest. In terms of biblical didactics, implementing Bibliodrama in the metaverse has the following advantages. First, it helps to construct a dramatic situation and environment so that the meaning of the biblical text can be proved relevant to today's learners, not something belonging to the past. Second, in the metaverse, the historical space and characters of the Bible can be realized in virtual reality to produce a 'situational play'. Demonstrating freedom, imagination and creativity in the metaverse learners play in Bibliodrama. This way they also become aware of the hidden meaning of the blank pages in the Bible. Third, the metaverse environment

is not static but dynamic and interactive; Bibliodrama pursues an interpretation that harmonizes spirit and body. Therefore, through the dynamic activities of discovering the meaning and significance of the Bible, it is possible to form a holistic faith in which spirit and body act as one.

《 **Keywords** 》

Metaverse, Bibliodrama, Learning Environment, Roblox, Zepeto, Ifland.

I. Introduction

As social distancing measures are lifted due to COVID-19, non-face-to-face online meetings have become commonplace. Also, as the current pandemic situation continues, there exists an increasing demand for recreating offline experiences online. Naturally, attempts to link offline and online experiences are increasing as well. For this reason, the metaverse, which provides a new experience for people who want to overcome the boundaries of online and offline platforms, virtuality and reality, is attracting worldwide attention and has a significant impact on our daily lives and society as a whole (Lee, 2021).

Over the time the scope of implementing the metaverse such as medical, industrial, and education has expanded. Nowadays, people use avatars to create and sell goods within the metaverse, shop with virtual currency in virtual reality. It is even possible to visit online exhibitions and concerts or meet in virtual classrooms. In response to such social changes, the Minister of Education suggested the active use of the metaverse for educational purposes to maximize the educational effect. She added, "The educational use of the metaverse will be a new challenge that will enrich learners' educational exper-

riencee.” (Kim, September 08, 2021.).

In accordance with the policy of the Ministry of Education, Korea Education and Broadcasting Corporation (EBS) signed an MOU with Hanwha Systems ICT Division on the establishment and operation of 'EBS Meta Campus', a metaverse-based education platform that allows users to imagine and experience future jobs using the metaverse. With the signing of an MOU with EBS, Hanwha Systems plans to develop a metaverse education platform for EBS. This virtual public education space will provide materials and services for primary and secondary level learners (Lee, December 08, 2021). The usage of the metaverse in university education is not merely limited to short-term events, such as festivals, entrance and graduation ceremonies. There is a growing number of school classes and even the metaverse-related master's and doctoral programs in universities. (Heo, October 18, 2021).

The metaverse platform is rapidly expanding its application areas to games, daily life, industry, and education. Futurist Roger James Hamilton predicts, “It is estimated that by 2024, we will be spending more time in 3D virtual worlds than in today’s 2D internet.” In fact, studies show that users of the metaverse platform Roblox spend on daily average more time on Roblox than on TikTok or YouTube (Han, 2021). In other words, it is predicted that the time people spend on the metaverse platform will increase in the future, and it is also expected that the transition to the metaverse will accelerate, amalgamating real-world activities – economy, education, and society – with virtual.

The main reason why people are enthusiastic about educational metaverse platforms is that users, who used to be merely content consumers, with metaverse platforms can create ex-

perience and value. In the existing online service system, users are unilaterally content consumers, but in the metaverse, users create and customize new spaces where they can program synesthetic experiences and simulations. These characteristics of the metaverse can be actively utilized in the educational field. It is possible to design a learning activity that will significantly broaden the learner's freedom and experience by utilizing the metaverse platform. Currently a widely accepted method of education is a teacher-led lecture-based education. In contrast to that, in the metaverse education learners are granted with infinite autonomy to explore questions they find interesting and relevant. In addition, by transcending time and space, absorbing ideas from millions of people, it will be possible to conduct self-directed learning that will let us come up with our own original answers (Koh, August 09, 2021). The most representative examples of the use of the metaverse include interaction with virtual avatars of historical figures, medical training in augmented reality, and art classes in virtual exhibition halls. The educational application of the metaverse goes far beyond making classes look interesting; it also encourages learners to deepen their learning and expand their experience (Kim, September 08, 2021).

Then, when the metaverse virtual education expands, what kind of changes and opportunities will Bible education face? If education in the metaverse has a positive impact on effective learning, such as expanding learners' freedom and experience, improving learning, it is worth to apply it to teaching the Bible. Along with Bible studies through biblical drama it can also possess didactic functionalities, it can be used for didactic purposes.

The beginning of Bibliodrama stemmed from the awareness

that approaching Bible education only from a cognitive perspective can cause problems. Bibliodrama is a biblical didactic methodology that uses to the words of the scripture with emotional imagination, creativity, and spontaneity to solve problems of self and community (Kim, 2009). As a biblical pedagogical approach, Bibliodrama is an empathic and communicative learning method in the form of a role play. It seeks interaction with the world of the learner and the world of the Bible through improvisation in studying the content of the Bible. According to the biblical didactic approach, the meeting of Bibliodrama and metaverse can cause a positive effect on modern learners in terms of learning environment and interest in learning, above all else.

Talking about learning environment, social cues can be provided in various ways comparing to the existing text-based online learning environment. Therefore, the metaverse virtual learning environment has an impact on social reality (Oh, Bailenson & Welch, 2018). In terms of interest in learning, it is the influence of situational interest that plays the important part. Situational interest can be developed through interaction between the learner and the learning environment (Kim et al., 2008). It is reported that the metaverse virtual reality media enhance situational interest because they present it in a concentrated and immersive form, the final content is very rich. Therefore, this study aims to take a biblical didactic approach to Bibliodrama on the metaverse platforms. In other words, for an interesting and effective Bible study suited for modern learners, the implementation of Bibliodrama in the metaverse virtual world is to be approached didactically.

The research was conducted in a few steps. Firstly, it discusses the learning environment of the virtual reality world

and the understanding of the metaverse world in the metaverse and learning environment, and situational interest. Secondly, this work analyses the biblical understanding of the biblical drama and its three-layered structure. Lastly, using three representative metaverse platforms this work examines the implementation of Bibliodrama in the metaverse world. Since this study is the first attempt at approaching the implementation of Bibliodrama on the metaverse platforms in a biblical and didactic way, it is expected that there will be significant implications for future Bible studies that use the metaverse.

II. The metaverse and the learning environment

1. The world of metaverse

'Metaverse' is a compound word made up of 'meta' and 'universe'. It means a virtual world that exists beyond the real world. Also, it refers to the New World of the digitized Earth, or the world expressed through various digital media such as Internet and smartphones. The concept of the metaverse first appeared in the 1992 American science fiction novel 'Snow Crash', where characters appear as avatars in a three-dimensional virtual world called the 'Metaverse' (Kim, 2020). Since that, many studies and discussions attempted to recreate the metaverse. In recent years, Roblox and Zepeto have become an issue. Due to COVID-19 the number of online events increased and the metaverse has emerged as a new alternative to non-face-to-face activities in the pandemic world along with the explosive interest in virtual reality.

S. H. Lee (2021) viewed the metaverse as "a world in which

virtual and real interact, coevolve, and create value through social, economic, and cultural activities within it". Koh et al. (2021) defined the metaverse as "a 3D-based virtual reality in which daily activities and economic life are conducted through avatars representing real people". Here, daily activities and economic life are extensions of the reality, so the virtual world and the real world are combined, and activities and life in the real world expand into the 3D virtual world. To summarize, the metaverse is not simply an activity of the virtual world, it goes beyond a combination of the reality and virtuality. The metaverse is a world in which value can be created through interactive social, economic, and cultural activities expanding the real world into the 3D virtual world.

The metaverse is classified into four types - ① Augmented Reality, ② Lifelogging, ③ Mirror World, ④ Virtual World (Acceleration Studied Foundation, 2007). ① Augmented reality is a type of augmentation of the external world (ASF, 2006). It is a technology that superimpose a virtual 2D or 3D object on the real-world object, to make it feel like 3D. Although currently this augmented reality technology is used mainly in games, such approach has found place in the field of vocational training to buster work efficiency. There is an example of using see-through goggles in the aircraft assembly process for complicated wiring diagrams; it is proved to be useful in providing necessary information for problem solving and expanding the operator's field of vision (Thomas & David, 1992; Jung & Kim, cited in 2021). Augmented reality technology is evaluated to be effective in cases where direct observation is difficult, continuous practice and experience are required, visual explanations such as drawings are necessary, or in fields with high cost and high risk (Han & Lim, 2021). Examples where

augmented reality technology is used for educational purposes include AR Book, AR application simulation, and location-based AR educational content.

② Lifelogging uses information and communication devices such as smartphones and PCs and interfaces such as wearables and the internet of things. They record, organize, store, and share data (recorded biometric information, amount of exercise, location, etc.) generated through personal activities like daily hobbies, leisure, and health via Twitter, Facebook, Instagram, and wearables. In terms of complementing reality, lifelogging is similar to the augmented reality. However, it can be said that it shares some similarities with the virtual reality too because it is a system of information depended on participation and actions of individual users (Jeong & Kim, 2016).

③ A mirror world is a virtual world that like a mirror embodies the structure, information, and appearance of the real world. It is not a simple replica of the real world, but a meta-universe that efficiently expands into the real world (Gam, 2020). Services related to the mirror world are connected with maps services such as Google Maps and Naver Maps. They make all real-life activities, travel, reservation, courier delivery information check, taxi service convenient and efficient. Educational uses include Google (google earth, education, voyager), digital labs, and virtual learning spaces (zoom, google meets, teams, webex, gather town, roomkey, Minecraft). They show the real world like in a mirror and provide information and space necessary for learning

④ The virtual world applies virtual reality technology, including 3D graphics and communication tools, to create a sense of presence in the virtual world. One of the characteristics of the virtual world is that it creates an avatar that expresses the

user's self and user's participation in the 3D space of the internet. In other words, it is possible to design cultural backgrounds of time, personalities, and institutions in the virtual reality. In that space, avatars can explore, communicate and even perform daily economic activities. Examples of such a life-type virtual world model include Second Life, zepeto, roblox, spatial, and the like.

Above four types interact with each other and rapidly develop into a metaverse form of the new convergence service. Among these four types, the virtual world is the most actively applied in the field of education. Koh Seonyeong et al. (2021) presented the following five (5C) characteristics of the metaverse in the virtual world. The first one, world view (Canon): In the metaverse, worldview is not fixed but formed by time and space created and developed by designers and participants together. The second, Creator: In the virtual world of the metaverse, participants can be users and creators at the same time because anyone can create, cultivate, and develop content. The third, digital currency (Currency): Within the metaverse, various content can be distributed for digital currency, produced and consumed. The fourth, Continuity: Within the metaverse, daily life, economic activities, and leisure are a continuous rather than a momentary act, so the virtual avatar and the real-life user influence each other. The fifth, Connectivity: The metaverse connects the real world with the virtual and users (avatars). Sharing information through connections that transcend time and space create and expand the new world of the metaverse.

2. The metaverse, learning environment, and situational interest

1) The metaverse and learning environment

In a learning environment where the user interacts with 3D objects in the 3D cyberspace, such as the metaverse, the influence of social presence and coexistence must be increased (Jeong et al., 2021). The learning environment we encounter daily in everyday situations is a result of physical and emotional interactions between the teachers and the fellow learners in the same space. This joint action can exert influence even in such 3D space as the metaverse (Bieńkiewicz et al., 2021). The sense of social presence in the online learning environment is recognized as a complex attribute determined by the group size, learning tasks, and relationships among peers (Lowenthal & Dunlap, 2020). It is similar to co-presence. Youngblut (2003) defined coexistence as a subjective experience of recognizing the existence in the same computer-mediated environment with others, even being physically in different locations.

This sense of coexistence is also linked to learning presence. The last one can be seen as the subjective recognition of relationships with others in the computer-mediated online learning environment. According to platform comparison studies, the sense of social presence is higher when audiovisual social cues (video conferences, avatars etc.) are abundant than in text-based online learning (Kim et al., 2014; Kim et al., 2013). Oh, Bailenson & Welch (2018) say that the virtual reality-based and text-based online learning environment have different effects on social presence. The reason is, the virtual reality-based online learning environment can provide social cues – tactile, visual, auditory, etc. – in various ways. Therefore, as the researchers stated, we should apply these considerations in the process of design-

ing virtual reality platforms. In addition, Di Blas & Paolini (2014) argue that cooperative learning activities can be promoted on the learning platform with 3D spatial sense similar to the metaverse.

2) The metaverse and situational interest

Situational interest can be developed through interactions between the learner and the learning environment. It has an important meaning in learning (Kim et al., 2008). The situational interest is a concept distinct from the individual interest, as it is about the source of the learner's interest. The personal interest concerns a specific task and topic of the individual, and is relatively constant and stable. Situational interest is a psychological state that arises specifically in response to the stimulation and features of the environment; it is short-termed and immediate (Urdañ & Turner, 2005; Hidi & Renninger, 2006).

Among these two sources of interest, the situational interest is pointed out as more important than the personal interest. This is because, the development of personal interest takes a long time; on the contrast, the situational interest can occur immediately after the interaction between the learner and the learning environment. Because of this, from the viewpoint of instructional design, the situational interest is considered more important than the personal interest. Even if there is no personal interest, learning motivation can be enhanced through the situational interest under the influence of external stimulus or learning environment. In addition, learners who are interested in specific areas related to situational interest may have higher learning participation (Linnenbrink-Garcia et al., 2013).

The metaverse virtual reality media is reported to promote

situational interest because such media provides plenty of information in an immersive way. A study by Lin, Yu, Sun & Jong (2019) compared two groups of learners, one read about the university library on a tablet and the other learned about it in virtual reality. That study claimed that the virtual reality group had significantly higher situational interest. A study by Parong & Mayer (2018) compared studying human biology through regular presentations with study that used virtual reality. Results showed that the virtual reality group scored relatively high in immersion, learning motivation, and situational interest, however showed a low score in the post-test. Likewise, an individual's sense of social presence in the metaverse environment can be a factor that has a positive effect on situational interest and perceived achievement (Cho et al., 2015; Wang et al., 2012). In addition, it promotes collaboration with other people, and we can expect that it will have positive effects on education.

As was found out by futurist R. J. Hamilton, the metaverse has longer average daily usage time than YouTube (Han, 2021). Therefore, it is expected that the transition to the metaverse in which real and real-time educational activities (offline classes, ZOOM, Google Classroom) are connected and fused with virtual will accelerate in the future. In the metaverse learning environment, an individual's sense of social presence has a positive effect on situational interest and perceived achievement. Researchers have positive expectations regarding the metaverse's ability to promote cooperation among people and its positive effects on learning. In addition, physical and emotional joint actions of teachers and fellow can exert their influence even in the 3D space of the metaverse.

If so, how will change Bible studies in the context of ex-

panding virtual space education? In the world of the metaverse, Bible education will face changes and find new opportunities at the same time. It lies in the implementation of Biblical education through Bibliodrama on the metaverse platforms. The reason is that in the 3D metaverse world, the realization of the Bibliodrama can promote collaboration, connect actions and emotions, and give learners a sense of social presence, situational interest, and perceived achievement.

III. Bibliodrama

The coronavirus pandemic has made it difficult for churches to organize face-to-face worships. So, church education was forced to accept the technologies of the 4th industrial revolution. In addition, the protracted pandemic, which no one in modern society has ever experienced, is spreading in society the atmosphere of confusion and fear, absence and emptiness. Under these circumstances, the modern church could not adequately respond to the unpredictably diverse needs and conflicts of people's lives. For this reason, it can be said that the modern church is falling into the complex crisis.

Bibliodrama was one of the response methods of the European churches that were the first that experienced the decline of the church. The Bibliodrama methodology devised by Western Christians is not just a cognitive approach to Bible education. It is an attempt to solve the problems of one's self and the community with the word of the Bible, with emotional imagination, creativity, and spontaneity. It is also a methodology that aims to find a religious answer by entering into the Biblical events, asking questions and talking about the problems of

people living in complex modern times (Kim, 2009). This, Bibliodrama as one of the forms of the biblical didactic approaches to Christian education is a learning method through empathy and communication, in the form of a role play. Bibliodrama seeks interactions with the world of the learner and the world of the Bible through improvised performance of the content of the Bible.

1. Bibliodrama and the Bible

Christianity is based on the Bible. This is because we discover, understand, and relate with the Triune God, the object of Christian faith, through the Bible. As such, it is no exaggeration to say that the Bible is the basis of Christianity, it is everything. However, the existing Bible education demonstrated many problems of the passive, static, and teacher-centered, indoctrinated education. Therefore, it can be said that for Christians, the word of the Bible failed to become the merit of human life and the fundamental principle of life. In order to solve these problems, the author discusses the dynamism of Bible education, and propose Bibliodrama as a methodology that can supplement the old Bible education.

The Bible understands the biblical drama as the following. First, Bibliodrama does not just refer to the Bible for context or situations of the past. It constructs dramatic situations and environments to be viewed as meaningful for today's learners. In other words, the situation and environment are formed so that learners participate in the dramatic biblical event and listen carefully to the content of event. Second, Bibliodrama views the events of the Bible as one semantic space and pays attention to the meaning of what is hidden between the lines.

Third, Bibliodrama seeks to form a holistic faith in which body and mind are united by pursuing interpretations that harmonize not only the spirit but also the body. From the perspective of Bibliodrama, the Bible is superior to human interpretation, human can only have faith in the Word of God. Therefore, it creates a way for learners to actively participate in the interpretation of the meaning of the Bible at the existential level they are capable of despite the limitations of their interpretive abilities (Koh, 2016).

B. S. Lee (2008, 13) asserts that the purpose of Bibliodrama is to bring believers closer to the Bible and embody it in their body, so that they can put the teachings of the Bible into practice through the specific experiences. It means to make the story of the Bible one's own story, to experience the Bible till they act with their body and mind, reason and emotion, and will. Through the role-play of the Biblical stories, the word of the Bible is recreated within rationally interpreted situations and emotions of joy and sorrow, sensitivity and thrill, anger and excitement experienced by body and mind.

H. Y. Kim (2008) describes the educational value of such Bibliodramas in the following five ways. First, it is a dynamic empirical education in which the whole body participates; Second, it is an improvisational play-based education that motivate creativity and spontaneity; Third, it is an education that merges various fields such as music, art, theater, and culture in line with the changing times; Fourth, it is an education that helps individual mental health and faith growth; Fifth, it is an education that through interactions improve the community spirit.

2. Progress of the Bibliodrama

W. S. Koh (2019, 122-126) asserts the following three basic characteristics of Bibliodrama. The first is spontaneity and creativity. The second is the dynamics of interaction. The third, blank pages of the Bible as the aesthetics of slowness. It consists of three elements, "Bible (blank space)-drama (dramatic mode)-participant (physicality)". So, the specific progress method of Bibliodrama is warm-up – performance – reflection.

Warm-up is the process of changing the audience to become participants in the play; the director explains the rules, and the participants voluntarily participate and create an atmosphere for creative interaction. Acting in the Bibliodrama play is not to perform learned actions like in a common play, but rather to think, speak, and act like a biblical character in the historical background and historical situation of the Bible. In this process, the director should not only encourage the participants to perform well, but also explain the Biblical scene and allow the actor to imagine the scene and act accordingly. Here, the actor can express the sensual emotions through gestures, dance, monologue and dialogue (Krondorfer, 2008, 358-364). Reflection is what the actor shares with the participants, the feelings that the actors felt in the process of acting. It is starting after actors finished their performance, breaking away from their roles. The director creates an atmosphere of sharing so that the process of reflection proceeds naturally, and the participants can exchange their feelings and thoughts in the process of acting or observation. At this time, by rereading the Bible in a traditional way, we can review the meaning of the text and compare it with what we experienced during the acting or watching. It is important to share thoughts that are

different from the existing in the text of the Bible and allow new and diverse interpretations to emerge.

Through this process, while interacting with the Bible, participants can become the main agent of positive and active interpretation. In addition, the process of sharing supplements the knowledge and empirical limitations they have had, and an individual's subjective interpretation of the Bible can develop into an intersubjective interpretation (Koh, 2020, 24-25; Krondorfer, 2008, 365-370).

IV. Implementation of Bibliodrama through metaverse platforms

Arizona State University (ASU), the leader in innovation among the US public universities, offer courses with 100% on-line classes for some majors. In addition, as a way to overcome the limitations of online courses, artificial intelligence (AI) is used to maximize learning efficiency. Olin College of Engineering, famous for its project-oriented education, conducts projects related to companies, research institutes, and non-profit organizations without specific departments or majors. The curriculum of Babson College, a university specialized in the field of business administration, is rooted in practical training (Seong, February 09, 2022). Thus, education can no longer remain traditional, and should continue to foster innovations and changes. Bible education, too, should no longer be limited to traditional cognitive catechetical or face-to-face instruction but should undergone changes. It is necessary to adopt a biblical didactical approach that can maximize the learning efficiency in a way that is familiar and accessible to

modern learners.

In this aspect, Bible education should open possibilities to learn through the implementation of Bibliodrama on the metaverse platforms. On the metaverse platforms, learners can produce a Bibliodrama through the situational act and develop their emotional imagination, creativity, and spontaneity. This will guide learners through the events of the Bible, help them reflect on their problems; and sharing the process with each other, they will be able to look back on their lives with the words of the Bible and rediscover the meaning of life.

Then, what are the types and characteristics of metaverse platforms that implement Bibliodrama? S. Y. Koh, H. G. Jeong, J. I. Kim, and Y. T. Shin (2021) classified the metaverse platform types into game-based, SNS-based, and living industry-based. Minecraft and Roblox fits into the game-based category, Zepeto into the SNS-based, and Virbela into the living industry-based. Among the Korean metaverse platforms, SK Telecom's JUMP VR and Naver's ZEPETO are the most known. Next we will look into the characteristics of the following several metaverse platforms and discuss the possibilities of realization Bibliodrama on them.

1. Roblox

Roblox is a metaverse platform launched back in 2006 that allows users to create their own space and enjoy games in real time using Lego-shaped avatars. In addition, Roblox is like a second real world in which the economic ecosystem operates through the virtual currency called 'Robux'. (Lee & Han, 2021). Roblox is valued for its high educational utility in cooperative learning, role play, problem solving, motivation, and inter-

action (Long, 2019). Instructors and learners can create and use their spaces to freely express their creativity and imagination without space or time obstacles. That is why in Roblox it is possible to design lessons according to the teaching or learning purpose. In this respect, Roblox is praised as the platform with the greatest potential for educational use in the virtual world. Roblox uses case studies to actively learn ancient cultural sites and create virtual travel tours. (Meier et al., 2020).

In Roblox, learners who are familiar with Lego blocks make avatars according to the roles appropriate for the characters in the events of the Bible, even if it is just a Lego-shaped avatar and freely implement the cultural relics as the background. This way, in Roblox we can freely create a situation and an environment necessary for Bibliodrama and engage learners. Therefore, it is possible to make a dramatic composition to explain the Bible as a series of events that is relevant to us today, not just in the context and circumstances of the past. In other words, through the Roblox platform we configure the situation and environment so that learners can participate in a dramatic biblical event and also pay attention to the meaning of the event itself. In addition, it is possible to view the events of the Bible as a semantic space and to comprehend the meaning hidden in between its pages. In addition, the fact that even in the virtual space, we can move our bodies to perform a situational play can foster a holistic faith that integrates body and mind.

2. Zepeto

ZEPETO, released in 2018, is a PC and mobile metaverse

platform based on AR avatars. Although ZEPETO is a platform, it is also available on social media, and possesses various functions such as avatar decoration with clothes, hair, accessories, or communication with other people, and building friendships (Namu Wiki). As a metaverse platform, ZEPETO is a virtual world. However, the same places that exist in the real world can be visited in ZEPETO too. As an extra, it lets users purchase products and participate in social activities. ZEPETO aims to become a virtual world platform where using 3D avatars anyone can create what they dream of. (Naver corp). Also, in ZEPETO, you can enjoy storytelling through a role play called 'Situational Play'. The story culture of Metaverse can be predicted through VRChat, a VR game. VRChat is similar to the traditional one in a way that speaker and listener chat with voice in the same virtual space. However, in the metaverse virtual reality, it is attracting attention as a new story culture like for example situational play and video comics. Zepeto can create high-quality avatars and virtual worlds, but it has some restrictions - only up to 16 people can participate at the same time and space. Still, it has the advantages of being able to design the virtual world in a form similar to the real one, and discover one's self in the virtual space through the reality-based avatar. (Ministry of Education official blog).

Since ZEPETO was launched by a Korean company, it is more easy for learners from Korea to participate in a situational play of the virtual Bibliodrama. Above all, by exploring the characters from the biblical events, you can design clothes that are appropriate for the time. Through such process, learners can get a glimpse of the biblical times and decorate their avatars similarly to the characters. In addition, the historical places of the Bible that exist in the real world likewise

can be visited in the virtual world; using these sites you can compose the dramatic situation and environment for the Bibliodrama. Through these processes, learners will be able to see the Bible not merely in context of past events, but in context of current issues.

3. Ifland

Ifland was released as a metaverse platform in 2021 by updating the existing 'Jump Virtual Meetup' app(Lee, January 14, 2021). Ifland is streamlining the process so that you can easily and conveniently participate in the metaverse world, 800 kinds of avatar costume sources, more than 21 various room themes, and 130 people can communicate in the same space(Woo, July 26, 2022). In Ifland, an avatar can be transformed into another 'you', there are lots of hairstyles, clothes, various face shapes, and accessories. Inland lets you choose a space and background that fits the theme of the meeting, and even during the meeting you can navigate and move to other meetings. In addition, it is possible to communicate freely by sharing videos and documents at conferences, small groups, and performances, and there is a function to explain the shared file in voice. Like the zoom platform, the host can set and adjust microphone control, set up various maps such as cafes, classrooms, playgrounds, and conference halls, or open a secret room so that only specific groups can meet.

In Ifland, learners can decorate their avatars with characters from Bible events. When they explain the Bible situation, they become actors and will be able to compose and perform scenes by selecting a virtual space suitable for them.

At the conclusion, after the acting, the director can create

an atmosphere of sharing so that the process of reflection proceeds naturally. In addition, the process of reflection will allow the actors to move away from their roles and explain their feelings they experienced in acting by exchanging videos and documents.

The use of the metaverse platforms for Bibliodrama can foster learners' spontaneity and creativity in an interactive dynamic and teach how to experience the aesthetics of slowness in the blank pages of the Bible. Also, the metaverse platforms can be utilized by fully considering the triple structure of the Bibliodrama - "Bible (blank space) - drama (dramatic method) - participant (physical nature)". In addition, when implementing Bibliodrama using the metaverse platforms, it will be possible to sufficiently implement Bibliodrama by following the specific procedure (warm-up-acting-reflection). As discussed above, if we take advantage of the bible didactical approach to Bibliodrama using the metaverse platforms, it will be possible to design an effective Bible education with consideration of the learning environment and situational interest of modern learners.

V. Conclusion

It can be argued that the education via the metaverse is only at the initial stage. However, it is expected that, as the development of science and technology in the future educational environment progresses, the usage of metaverse will contribute to overcoming the limitations of modern education. Certainly, since the status of metaverse education has not yet been sufficiently verified, it is unknown what roles and limi-

tations it has in terms of excellence, equality, and effectiveness of education, or what new problems it can cause. However, this education has the potential to become a solution to the limitations of online and the situational limitations of offline education. From the aspect of Bible education, the didactic use of the metaverse and Bibliodrama would let users face new opportunities and changes.

Bible education using the Metaverse and Bibliodrama can have the following advantages. First, dramatic situations and environments can be constructed in the virtual world of the metaverse so that the meaning of the Bible become relevant to the lives of learners today, not merely addressing the past's events. Second, the metaverse can create a situational play by recreating historic sites and characters from the Bible in virtual reality. Therefore, learners can practice Bibliodrama by demonstrating their imagination and creativity thanks to the infinite degree of freedom granted by the metaverse platforms, and pay attention to the meaning hidden in the events of the Bible. Third, such type of Bible education can help learners to discover the meaning and value of the Bible and to form within them a holistic faith that unites both spirit and body. The metaverse environment is not static, but dynamic and interactive, and Bibliodrama pursues the interpretation that harmonizes spirit and body. Therefore, through the dynamic activities of discovering the meaning and significance of the Bible, it is possible to form a holistic faith in which spirit and body are one.

This way, the metaverse Bibliodrama will bring modern learners closer to the Bible and help them practice the teachings of the Bible in their daily life through the specific experience by the act of embodiment. In the metaverse environment

through role-play of the biblical story, body and mind experience numerous emotions such as joy and sorrow, flutter and thrill, anger and excitement. So it is possible to reproduce the words of the Bible lively after they are interpreted rationally.

To sum it up, the significance of Bible education using the metaverse and Bibliodrama are as follows. First, a greater self-management capacity granted by the metaverse let users develop creativity and spontaneity and let them experience a full-body dynamic experiment-based education. Second, it is possible to cointegrate various fields suitable for modern learners such as music, art, theater, and culture to teach the Bible through Bibliodrama. Third, through the metaverse dynamic communication it is possible to improve community and find in the events of the Bible meanings and values that make sense for modern-day individuals, thereby making education that helps faith growth.

Currently, the field of metaverse, which has infinite possibilities and creativity has been expanded rapidly. The real world and the virtual world is connected through the metaverse. Therefore, in the future, another self-formation and value creation in the virtual world would be possible. Metaverse enables educational abilities to include transcending time and space, allowing freedom to do anything, immersion through interest and fun, improvement of spontaneity and creativity, thereby would be excellent in educational environment and situational interest. Therefore, if the characteristics of the metaverse are actively utilized in the bible didactical aspect to realize the Bibliodrama, it will be possible to expand the freedom and experience of learners infinitely, helping form a holistic faith.

The significance of this study lies in presenting various theoretical backgrounds of the Bibliodrama project, which is

known as a new educational method of the Christian education through the metaverse platform. The limitation of this paper is that it does not outline the expected problems of Bibliodrama on the metaverse platform. Therefore, it is expected that the research on it and the verification of its effectiveness as a practical study will proceed as a follow-up study.

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국문 요약

메타버스 플랫폼을 통한 비블리오편극 구현에 대한 성서 교수학적 접근

서미경 (한국대학교육협의회/연구원)

본 연구는 메타버스 플랫폼을 통한 비블리오편극의 구현에 대한 성서 교수학적인 접근을 목적으로 하였다. 즉, 현대의 학습자들에게 흥미롭고 효과적인 성서 교육을 위해 메타버스 가상세계를 통한 비블리오편극의 구현을 교수학적으로 접근하였다. 교육에서 메타버스에 열광하는 대표적인 이유는 콘텐츠 소비자에 불과했던 이용자들이 체험과 가치 창출까지 가능한 참여자가 되었기 때문이다. 성서 교수학적 접근방법으로 비블리오편극은 역할극 형태의 공감과 소통을 통한 학습방법으로 성서의 내용을 학습함에 있어서 즉흥적 연기를 통해 학습자의 세계와 성서의 세계와의 상호작용을 추구한다. 비블리오편극과 메타버스의 만남은 현대의 학습자들에게 무엇보다도 학습 환경과 학습 흥미 측면에서 긍정적인 영향을 미칠 수 있다. 또한 메타버스를 활용하여 비블리오편극을 구현하면 다음과 같은 장점이 있다. 첫째, 성서 본문의 의미를 과거가 아니라, 오늘의 학습자에게 해당 되는 것으로 볼 수 있도록 극적인 상황과 환경을 구성할 수 있다. 둘째, 메타버스에서는 성서의 역사적 공간과 인물을 가상현실에서 구현하여 상황극으로 연출할 수 있다. 학습자는 메타버스에서 자유도와 상상력, 창의성을 발휘하여 비블리오편극을 구현할 수 있으며, 성서의 사건에서 감추어진 여백의 의미에 주목할 수 있다. 셋째, 메타버스 환경은 정적인 것이 아니라, 역동성과 상호작용이 활발하고, 비블리오편극은 영과 몸이 함께 어우러지는 해석을 추구한다. 그렇기 때문에 성서의 의미와 가치를 발견하는 동적인 활동들을 통하여 영육이 통합된 전인적인 신앙 형성을 할 수 있다.

〈 주제어 〉

메타버스, 비블리오편극, 학습 환경, 로블록스, 제페토, 이프랜드

- Received: 03/04/2022
- Evaluated: 03/28/2022
- Accepted: 03/29/2022