

## A Study on the Copyright Survey for Design Protection in Metaverse Period

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### **Abstract**

*Among human intellectual creations, the right granted by law to what is worth protecting is defined as intellectual property rights. Copyright is a legal right to creative finished products made by individuals, and in recent years, this legal right has been recognized as very important. In other words, copyright is a system created to protect the rights of individuals who created creations and to recognize their efforts. Works subject to copyright vary from poetry, thesis, novels to designs, paintings, music, and architecture, and the scope of the subject is gradually expanding. Recently, research has begun on how far the Metaverse design area absorbed into the real world among works. Computer-generated video productions and software program works are also subject to digital copyright protection, but it is also true that the interpretation of the author protection law for works, designs, and trademarks in the virtual world is unclear. This study aims to analyze copyrights based on case studies and theoretical backgrounds on copyright protection and to discuss the protection limitations of Metaverse design in the virtual world. In other words, the direction for the protection of Metaverse design is presented through clear distinction and definition of copyright protection in the tertiary virtual world. This study aims to present methods for design copyright protection in the era of Metaverse, respect copyright holders' creative activities, and develop our culture through protection of creations.*

**Keywords:** *Intellectual property rights, Copyright, Metaverse design, Design protection*

## **1. INTRODUCTION**

The Framework Act on Intellectual Property was enacted in 2011 to protect intellectual property creators from related disputes to ensure creative and stable activities and to contribute to the development of the nation's economy, society, and culture [1]. The Copyright Act was enacted in 1957 with the aim of contributing to the improvement of culture and related industries by protecting the rights of authors who are creators of works and promoting fair use of works [2]. Based on the theoretical concept of copyright, this study analyzed cases such as video cases, building cases, photographs, and posters. In fact, by creating avatar characters that operate within the Metaverse platform, the design was produced based on the movements provided by the platform according to the user's will. Since the character in the Metaverse also visually expresses the user's thoughts

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and emotions, copyright arises to the creator if there is originality as an art work. However, if the originality of the character produced by the users is excellent, it occurs to the user. It can be seen that creativity is important because Metaverse suggests the possibility of forming a community that can include real life in a virtual space. Through the results of this study, it is used as useful data for the scope of copyright that can be protected for the Metaverse platform and aims to spread the Metaverse copyright.

## 2. MAIN TEXT

### 2.1. Definition of Creative Common License (CCL)

CCL is an open license, and it is a system that allows copyright holders to use works without asking copyright holders for permission to use them. In other words, it allows users to freely use the creation while protecting the rights of the creation selected by the copyright holder. Founded in 2001 for the purpose of allowing partial sharing of copyrights, the Creative Commons non-profit organization distributed CCL in December 2002 by organizing the desired usage conditions and expression methods for each copyright holder. CCL was first introduced in Korea in March 2005, and Korea, Japan, the United States, Canada, It is used in more than 70 countries around the world, including Italy, France, and Germany [3]. Wikipedia is a representative search service that applies CCL in Figure 1.



Figure 1. Creative Common License

### 2.2. Terms of Use Standard License

If you have a CCL mark on videos, photos, or documents, you can easily know how and conditions to use the work, and you can freely use the creation according to the conditions without asking for a separate permission from the copyright holder. There are four standard licenses for terms of use of works: Attribution, Noncommercial, No Derivative Works, Share Alike in Figure 2.

	BY Attribution		NC Noncommercial
	ND No Derivative Works		SA Share Alike

Figure 2. Creative Common License symbol

## 3. EXPERIMENTS AND RESULTS

### 3.1. UCC(User Created Contents) Video Case

A video made by a child following the dance against the backdrop of Son Dambi's "Crazy" spread online. It was the first time when UCC (User Created Contents), a video that users took with a camcorder and made themselves, was released. The Music Copyright Association requested Naver to delete it because it was a

copyright infringement, but the blog operator filed a lawsuit confirming that there was no copyright infringement. This is because a child mimicked the singer's dance movements and followed some of the songs, but it cannot be found that the commercial value of the work is stolen and used for profit. This is because it was judged to be a work with its own significance of existence, recording children's dances, cute expressions, and actions in Figure 3.



**Figure 3. Son Dambi's "Crazy" video**

### **3.2. Case of Architectural Design Contest Work**

Gyeongju City held a design contest for the construction of a symbolic building of the Gyeongju World Culture Expo. However, the author was not indicated because the works selected as excellent works were used and submitted to the contest. In conclusion, it was judged that it violates the Copyright Act to not indicate that the author was awarded in the contest while constructing a symbolic building based on the work. This is because in the case of architecture, if creativity is proven, it can be protected by copyright. In recent years, strict standards have been strengthened to recognize works, and in order to be recognized as works to be protected, creators must set more value standards for design and design creativity in Figure 4.



**Figure 4. Gyeongju world culture expo symbol contest**

### **3.3. Case of Photography**

It is a photo of British photographer Michael Kenna's 2007 Fine Trees Study, well-known for his square black and white landscape photos, and a 2011 travel photo winning film *Waiting for Morning* by Korean Air. The picture of the sunrise dawn scenery of Sokseom Island in Samcheok, Gangwon-do, was used in TV advertisements. However, Kenna claimed that the 'copyright' of this photo, which used similar photos, was

violated. This is because the scenery of the same place was taken and the composition was very similar. If copyright holders have aspects of copyright protection, the general public has freedom of expression. Since the landscape is open to everyone, the court ruled that "natural scenery is a material of creation shared with everyone," and that Kenna's photos and photos used in advertisements have different overall feelings, so they are not copyright infringement in Figure 5.



Figure 5. 'Pine Trees Study' and 'Waiting for the morning'

### 3.4. A Case of Poster Photos

The following is an example of Demi Moore's pregnancy nude photograph taken by world-renowned photographer Annie Levovitz for the cover of the famous magazine "Vanity Fair." It is known that he took a picture with the same pose as this picture and used it as a promotional poster for the famous comedy film "Naked Gun 33 1/3" and was recognized for its fair use. Demi Moor's photos taken by Annie Levovitz created a new trend of shooting nudity for pregnant stars, and Vanity Fair, which features the photos, was recorded as one of the world's bestsellers. Advertising posters are visual transmission media that convey implications by inserting photos or images, leaving strong messages through repetition in Figure 6.

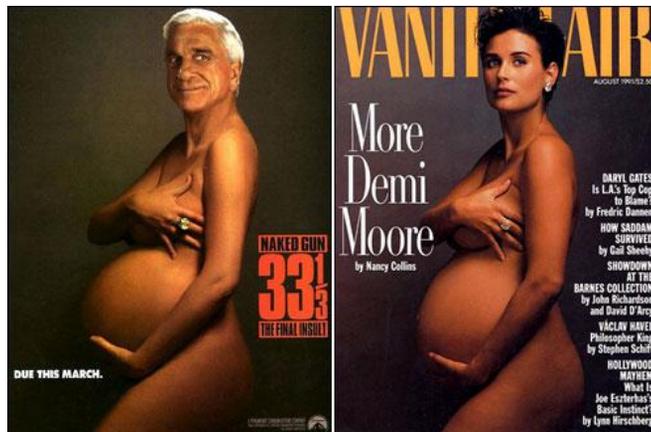


Figure 6. A promotional poster

### 3.5. Cases of Disputes Over Copyright Ownership

In 2011, there was a copyright dispute over the "Monkey Selfie" taken on Slawesi Island, Indonesia. It is a two-year court battle between British photographer David Slater and animal rights group "PEOTA, Peta." Copyright refers to the rights of the person who created the creation. A wild animal selfie coincidentally. The

copyright of the photographs taken by the camera is in humans, but it's about "the legal rights of animals". A debate broke out and ruled to give monkeys 25% rights. This case can also be seen as a result of a high evaluation of creativity in Figure 7.



Figure 7. Selfies taken by “Selfies”

#### 4. Metaverse Design Application

Metaverse, which means a three-dimensional virtual world, is becoming a key keyword in the IT industry as times change. Metaverse, which has evolved more than virtual reality in the era of the Fourth Industrial Revolution, appears in a form in which the virtual world is absorbed into the real world on the web and the Internet [4]. Metaverse is characterized by different characters having human exchanges with avatars of social and economic software in a three-dimensional virtual space [5]. Among the Metaverse designs, real characters can engage in social, economic, and cultural activities like the real world in a virtual space using the ZEPETO app, suggesting infinite possibilities for activating virtual space [6]. In fact, the Metaverse design copyright will be owned by the company that provides the platform, but it is not clear who has the right to various designs made by actual users. While avatars are active in Figure 8(a). Escalator riding in Figure 8(b). Buying things in front of the store in Figure 8(c). Eating chicken in the park in Figure 8(d). Visiting a convenience store in Figure 8(e). Calculate in front of self-checkout in Figure 8(f). Taking a walk is the activities pursued by individual users.

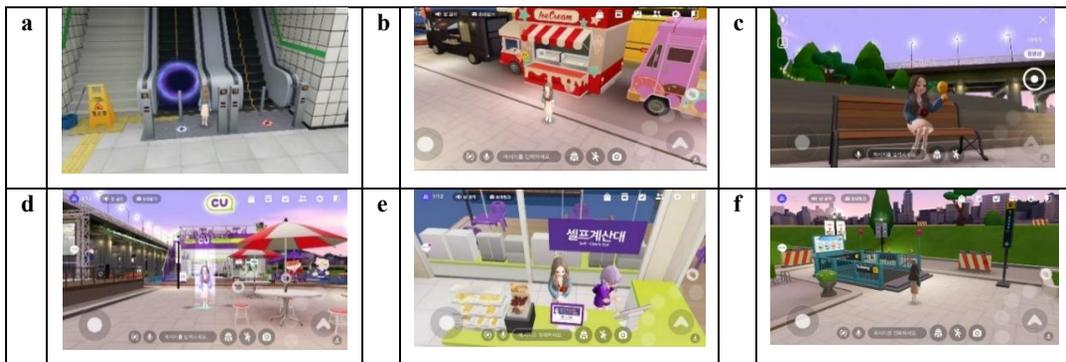


Figure 8. A case of developing a design using the Metaverse Zepeto application

#### 5. CONCLUSION

Based on the theoretical concept of copyright, which is a legal right to creative finished products made by individuals, this study analyzed cases of video, building committee cases, and photos and posters.

The system created to protect the rights of individuals who created the creation began research on how far the author protection law applies in the virtual world, and we actually created avatar characters that operate within the Metaverse platform. The avatar character in the Metaverse is based on the movements provided by the platform as artificial intelligence is inserted. Since the character in the Metaverse also visually expresses the user's thoughts and emotions, copyright arises to the creator if there is originality as an art work. However, if the originality of the character produced by the users is excellent, it will occur to the user. In other words, since there is a difficulty in determining the scope of creativity, a question of whether there is a copyright between a user or a platform has recently arisen. Even if the platform is a copyright holder for design elements, users can claim the rights of characters created by creatively combining them under the Copyright Act.

Creativity is important because Metaverse suggests the possibility of forming a community that can include real life in a virtual space. Through the results of this study, it is expected that it will be used as useful data for the scope of copyright that can be protected for the Metaverse platform and help spread the Metaverse copyright.

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