

# The Exploration of Public Performance Dance Art in the Background of the Emerging Metaverse Age

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## Abstract

The purpose of this thesis is to seek the development of dance performance contents in the metaverse era. The performance production mechanism, production-distribution-consumption, is put in a big frame, but the focus is on the planning and production of the work. First of all, the meaning and environment of dance performances in the metaverse era were diagnosed along with the explanation of the term of the 'metaverse era'. As can be seen in the case of convergence performance and Korean traditional dance performance, it was confirmed that the application of technology that can be in line with the metaverse era can create synergy with dance performances.

As for the development of dance performance contents in the metaverse era, the first thing to be adhered to is the application of technology based on the uniqueness of the dance genre. Second, from the perspective of the consumer, the audience, aesthetic.

At the same time, it is necessary to consider the role of a channel that can organically trigger experiences and enjoyment.

As it comes down to the problem of form and device, continuous research on this is necessary. In short, the development of dance performance content in the metaverse era focuses on the genre property of dance.

Accurate application of evolving technology and 'Metaverse thinking' that can increase the rapport with the audience, the consumer, are essential. Beyond contemporary values, the development of dance performance contents that can be left as future heritage comes from the chemical combination of dance and technology.

**Keywords:** metaverse, metaverse era, dance performance contents, convergence performance, cultural contents

## 1. Introduction

The era of the metaverse has arrived. It is an important time to preemptively respond to new environmental changes and seek strategies. The performance environment can be divided into the traditional situation in the conventional aspect and the future situation in the uncertainty aspect. Diagnosis and exploration of the properties of the performance mechanism leading to production-distribution-consumption are essential. In particular, it is impossible not to worry about the development of performance contents. This is because there is a performance ecosystem structure that can be linked to consumption through primary content development. The development of dance performance contents in the metaverse era is a factor that has driven the research.

Studies on the metaverse are not recent in terms of time.

This is because changes in the performance production and market environment took place in a short moment amid the COVID-19 situation. Finding ways to develop content according to technological evolution is also one of the important issues. In this study, the direction of discussion was explored through the diagnosis of preceding studies. The search for prior studies focused on two main issues. One is papers that deal with all matters useful for discussing the metaverse. Another is studies that are highly correlated with content development.

Regarding studies related to the former, Lee Ja-heon and Choi Eun-yong (2021) predicted the future by focusing on the performance distribution in the metaverse, a new paradigm of performance distribution. (Lee Ja-heon & Choi Eun-yong, 2021) This is significant in that it suggested the direction of performance distribution. There is in the age of information and communication technology (ICT), platforms are important. Han Sang-yeol (2021) discussed the metaverse that crosses the boundary between virtual and reality through the current status and prospects of the metaverse platform. Linked to metaverse composition principle and detailed functions (Lee Kyung-ah, 2021) metaverse world activity stage and an activity title.

Nam Hyun-woo, who provided a useful clue for metaverse companies to enter the market (2021) focused on identifying trends in the latest technologies in the thesis. (Hyunwoo Nam, 2021)

Among the studies related to the latter, studies that can obtain implications in the field of festivals and performances during content development were extracted. First, Shin Hyun-sik and Oh Hoon-seong (2021), who conducted research on the festival field, paid attention to convergence festivals. (Shin Hyun-sik & Oh Hoon-seong, 2021) Their study focused on the 2021 Seoul Drum Festival.

The concept and structure of the convergence festival were derived based on the perception of this study is useful for deriving implications for 'convergence', a major axis in the metaverse era. Regarding dance performance, Lee Ju-young (2020) has studied the relationship between dance and technology and the production environment surrounding the development of dance performance content. (Joo-Young Lee, 2020) Technology and performance production environment play an important role in the progress of this study. This can also be used as an essential element in the metaverse era.

This study, which discussed the development of dance performance contents in connection with the metaverse era, has a differentiated significance from previous studies. The first stage to move from the performance market to distribution and consumption is performance planning and production. It is meaningful to pay attention to content (work), the core product of this stage, and content development, the core process. In particular, the connection between technology and art with high correlation and complementarity, and the discussion of the overall environment surrounding dance performances are useful in exploring the general topography of dance performances in the metaverse era.

## **2. The Significance and Environment of Dance Performance in the Metaverse Era**

### *2.1 The Significance of Dance Performances in the Metaverse Era*

Performing arts and performing arts are essential. It is inevitably combined with stage expression elements such as stage, lighting, sound, video, stage equipment, large and small tools, costumes, and makeup. The combination of dance and media is increasing, and the artistic trend of convergence performance continues. Dance performances are also based on choreography and movement, but the acceleration of digitization and imaging is not a small number of times that can be witnessed at the performance site.

Metaverse is a compound word combining Meta, which means 'transcendence', and universe, which means 'world or universe', and is an expanded integrated space where the virtual world and the real world are connected. (Hong Hee-kyung, 2021) Integration and Convergence has a characteristic that can be intersected and woven through consilience and consilience. This is also the point where it connects with the dance performance. In order for this connection point to have a synergistic effect, the internal and external characteristics of dance must not be overlooked. As a genre with a non-verbal system, it is an art of movement in which choreography is the center. As for the external characteristics, it has a greater weight as a fine art or basic art rather than a cultural industry point of view, and although its marketability has expanded compared to before, it is still lacking in popularity. (Joo-Young Lee, 2020)

In short, in terms of content development such as planning and production of dance performances, the application of technology based on the uniqueness of the dance genre should be given priority. 'Uniqueness' here refers to the formal aspects different from other performance genres such as plays and music, and the inner nature of the dance genre.

The characteristics of sexuality are simultaneously expressed, i.e., based on dance movements and choreography. Therefore, it is necessary to pay attention to the temporal and spatial characteristics, the application of the differences between traditional and creative dance, and the connection with the expression of images or polarity.

From the perspective of the audience, who is the consumer, the role of distribution that can trigger the aesthetic

experience and enjoyment organically is required. This leads to a problem of platform and device.

## *2.2 Metaverse Era Dance Performance Environment*

Regarding the term ‘metaverse era’ mentioned in this paper, the researcher intends to define it as follows. In terms of time, the scope includes the present and future, when the term ‘metaverse’ is emerging and used. In terms of the stage scene, the meta bus is utilized, and it encompasses even evolution and development. This signifies a time of integration that encompasses the present and the future, and includes an initiative to overcome the present but look into the future. Keeping pace with the metaverse era with this meaning, it is necessary for the dance environment to have an organic nature that corresponds to the dance performance ecosystem.

In the 2012 Davos forum, ‘Hyper-connectivity’ was selected as a major agenda, and since then, hyper-connected society has been continuously addressed as an issue.

There is a bar ‘Hyper connected society’ means that everything such as people, things, and space is connected to each other through the Internet, and information is created, collected, shared, and utilized.

Refers to a society that Mutual prosperity within the boundaries of technology, people, and an environment which it is a structure in which scent is exchanged.

From this point of view, it is necessary to put primary weight on the basic situation of a hyper-connected society in the development of dance contents, especially in accordance with changes in the dance environment. Above all, virtual reality (VR), augmented reality (AR), mixed reality (MR), extended reality (XR), artificial intelligence (AI), Internet of Things (IoT), drones, Efforts to advance should be made with continuous interest in utilizing media art.

## **3. Searching for Development of Dance Performance Contents in the Metaverse Era**

### *3.1 Metaverse Era Environment and Factors to Consider*

It should be premised to consider the dance production environment required in the metaverse era. First of all, understanding and application of metaverse technology. It is required to apply the metaverse platform, devices, and related software according to metaverse technology changes. Technically, immersive display technology, interaction technology, content production technology, metaverse system technology, metaverse motion platform technology, and network technology can be cited. In particular, the representative types of the metaverse are augmented reality, lifelogging, mirror worlds, and virtual worlds. These are independent areas.

Convergence/complexity evolution research and application of this, which is something to keep in mind when developing dance performance contents.

### *3.2 Development of Dance Performance Contents in the Metaverse Era*

#### *3.2.1 Fusion Performance*

Due to the basic nature of the metaverse, fusion performance is an organically applicable part. The performance of ‘The Object’ (2021.6.11. ~ 7.3), a performance that organically combines modern dance and Korean dance, is an example of a performance jointly organized by Gyeonggi Art Center, Daegu Culture and Arts Center, and Jeju Art Center. This stage sheds light on the relationship between humans and objects by regulating the concept of ‘object’ as a subject where humans, the subject of seeing and thinking, is an object. It redefines the relationship between humans and objects by crossing ‘familiarization’ and ‘familiarity’.



Figure 1. &lt;The Object&gt; poster design

Strangeness and familiarity exist in everyday life, but in the realm of art, they also act as a major mechanism to enhance aesthetics. Subject and object are the main concepts of this performance. In particular, the point is to make the situation ‘unfamiliar’ by removing the customary properties of ‘objects’, both objects and objects. This is naturally connected to the redefinition of the relationship between humans and objects.

This performance provides implications in terms of ‘convergence performance’ when developing dance performance contents can be found ‘The Object’, which combines modern dance and Korean dance in contemporary art, has the significance of expanding the purity of dance aesthetics through convergence beyond the primary dimension of combining genres. From the point of view of dance aesthetics, it is that dance and art embody the three elements of ‘human’, ‘site specific’, and ‘object’ in a modern and contemporary way. Seats were installed on the stage to add a layer to this immersive realistic performance.

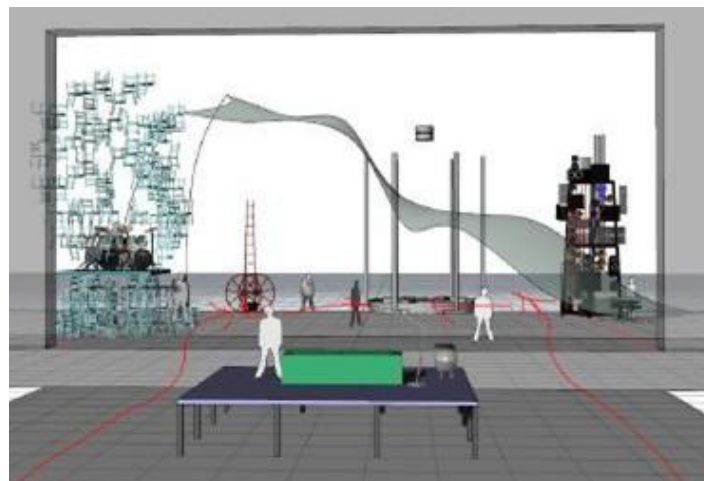


Figure 2. &lt;The Object&gt; Preset Design

The concept of ‘The Object’ is the convergence of exhibition, dance, and digital video technology. It showed the possibility of organic combination with ‘Mirror Worlds’ and ‘Virtual Worlds’, which are widely used in the metaverse. The ‘mirror world’ that embodies the real world as it is, and the ‘virtual world’ that is on the opposite axis from the real world, can be found in the following images in the work.

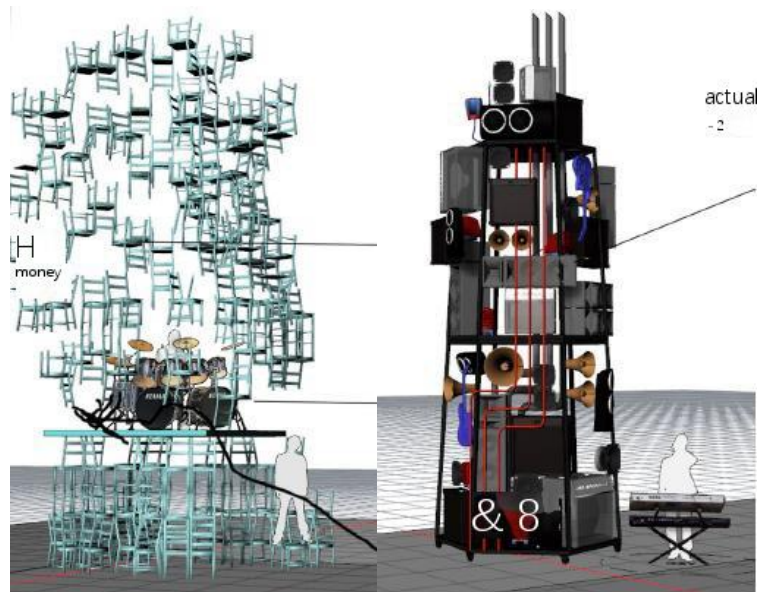


Figure 3. <The Object> swetw design (1) art<iclen<The Object> set design (2)

Through <Figure 3> and <Figure 4>, we can read the possibility of realizing sound and visual dimming. It acts as a focus and relaxation. Ultimately, the audience encounters a surreal situation by causing a change in recognition through complex actions such as ‘sound’, ‘sense’, and ‘visual’. This is the point where the metaverse mechanism can be triggered. This performance can be seen as an example that left room for use in the metaverse era. It is a content worth considering when producing similar performances.

### 3.2.2 Korean Traditional Dance Performance

Traditional Korean dance performances are basically based on historicity. There are times when creativity based on tradition is given based on court dance and folk dance. For example, 2021 SIDance’s first school performance, ‘Byuksa Dance’ stage, ‘Clean Record’ (2021. 11.10., Daehakro Arts Theater), each piece was presented as a gala performance. In particular, during the performances of ‘Seungmu’ and ‘Taepyeongmu’, synergy was created by promoting harmony between the work and the video. It showed advantages in terms of strengthening directing. Implications can also be found in terms of the metaverse.



Figure 5. <Korean Dance-Yupa Exhibition ‘Byeoksa Dance’> Video footage before the performance of Taepyeongmu



Figure 6. <Korean Dance-Yupa Exhibition 'Byeoksa Dance'>Taepyeongmu performance scene

<Picture 5> and <Picture 6> are each scene of the video and performance of the 2021 SIDance Korean Dance-Yupa Exhibition, 'Byeok Sa-chum-Clean Recording'. Screened before Taepyeongmu performance scene.

In <Figure 5>, the meaning of the transmission of dance is shown through a video of an entertainer.

In <Figure 6>, the contemporary calling and value of Byeoksa Dance, which continues the tradition, can be confirmed through group dance. In Korean traditional dance, it is necessary to actively utilize the metaverse mechanism that can be reproduced and reproduced across time and space.

As can be seen from the case of timely convergence performance and Korean traditional dance, the active application and utilization of metaverse technology in accordance with the metaverse era is meaningful in that it leads to the creation of contemporary aesthetics in connection with the inherentness and uniqueness of dance. Big. The core of the metaverse is the effective overlap and expansion of the virtual world and the real world. What underpins this is the combination of technology and art based on the clear concept of the work. It means that the unique movement and choreography format of dance are organically connected with technology. When this is realized, the metaverse era dance performance.

It is useful for the mission of content development [tearticle.net](http://tearticle.net).

#### 4. Conclusion

The purpose of this paper is to seek the development of dance performance contents in the metaverse era. To this end, the terminology of the 'Metaverse Era' was explained, and the meaning and environment of dance performances in the Metaverse Era were looked at. As can be seen in each case of convergence performance and Korean traditional dance performance, it was confirmed that the application of technology that can be in line with the metaverse era can enhance the aesthetic characteristics of dance.

In terms of dance performance content development, priority should be given to applying technology based on the uniqueness of the dance genre. As mentioned above, 'uniqueness' is a characteristic of the internal properties of dance and formal aspects that are different from other performing arts genres such as plays, classical music, Korean traditional music, opera, and changgeuk. In other words, dance is based on movement and choreography.

For this reason, there are various issues such as the need to pay attention to the temporality and spatiality, the application of differences between traditional dance and creative dance, and the connection with the expression of the image or polarity pursued in the work.

In addition, from the perspective of the audience, who is the consumer, the role of distribution that can trigger the aesthetic experience and enjoyment organically is also required. Distribution is located in the middle between production and consumption. After all, it is a communication role. From the perspective of supply and demand, this boils down to platform and device issues. Therefore, the role of the theater is also very important.

After all, in the development of dance performance contents in the metaverse era, it is important to put the genre attribute of dance at the center, organically combine with evolving technology, and 'Metaverse thinking' that can increase the level of sympathy with the audience, the consumer. Beyond contemporary values, the development of dance performance contents that can be left as future heritage comes from the chemical combination of dance and technology.

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