A Study on Application Examples of Media Façade by Technology Case and Content Type

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Abstract

Recently, media combined with IT and architecture are attracting attention for advertising and promoting companies. This phenomenon, referred to as the media façade, is a new trend in 21st century architecture that combines lighting, video and information technology. media façade is a medium that can express the growth of LED lighting industry, the mediaization of building envelope, urban identity and urban identity, and discussions about its growth potential are actively underway. The purpose of this study is to investigate the overseas case study of media façade, which is attracting attention as a global trend, and to draw out the type factor of media façade.

Keyword: media façade, media art, architectural design, space design, LED technology.
1. Introduction

New attempts to use new media are not only in the field of media art, but also in many other fields. Artists began to look beyond the screen to urban space, and architects became interested in the experimental spirit of artists. It is to overcome limit of fixedness of building with art of fluid attribute through digital technology and to symbolize place and value. The media façade refers to the lighting system that can adjust the brightness, color, and movements of light using LED (light emitting diode) lighting and beam project in a way that the building and lighting are integrated[1]. The façade combined with digital technology creates a new image in a monotonous urban environment, plays a role as a mediator in the digital age, and connects and communicates people and the outside environment. This phenomenon presents new possibilities as an interface medium in which architecture can display information to the outside and communicate with the public[2].

In Korea, Samsung Electronics, LG and other telecom companies that are active in the global infrastructure and smart mobile environment and optical communication network are also in Korea. The problem is that diversity of contents and informational artistry are needed. There is a difference in the number of people who are targeted, and regional variation should also be considered. TV depends on viewership and time of day[3]. Computer, smartphone and smart pad environment are one-person media based on one-to-one communication. Digital signage can be used for more than 10

It is a new media that should consider the productivity and the characteristics of the pedestrian in the area because it is in phase. The purpose of this paper is to investigate how these diverse needs are applied and utilized, and to predict how the content will be developed in the future society[4].

The media façade is a next generation display - a light emitting diode (LED). It uses a beam project to decorate the building wall like a large screen. It is to use the large building of the city as a medium to convey visual beauty and information. In this way, the media functions of the media façade are being explored variously as a moving image media, media art presentation, information presentation in the city center, and marketing means through corporate outdoor advertising[5]. Therefore, the purpose of this paper is to present the proper activation plan of domestic media façade by analyzing various functions of media façade, overseas case study, domestic situation and problems. For this purpose, Section 2 examines cases of overseas media façades and describes their characteristics. Section 3 describes the derivation of the type factor by the new paradigm of the domestic media façade, and Section 4 describes the correct activation plan for the domestic media façade.
2. Media façade case study

One of the most important features of the media façade is that it mediates communication with citizens in urban space. This function, expressed in media art, gives a feeling of liveliness to the outer surface of the building and serves to moisten the sensibility of the citizens. In addition, he designs the image of the city night by sublimating the lighting into art from the urban landscape perspective[6]. Accordingly, the building in which the media façade is embodied expresses a unique image of the city as a landmark of the city. Here, we will look at cases of overseas media that express media elements, landmarkity, and individual images of the media façade. The case will be categorized by the participating countries of media façades Festival Europe 2010.

2.1 Media façade Technology

The field of lighting design is closely related to the economic, cultural and technological fields. As economic and technological developments have led to the development of diverse lighting sources, and as cultural demands have increased, unique lighting design techniques have been applied in many places. As the light source of point lighting and band lighting was developed in the initial basic projection method, the landscape lighting was gradually equipped with color, point, line, and surface formative components, rather than simply light[7]. Nowadays, as the more technologically advanced light source such as LED, non-electrode light source develops, its application method becomes much more diverse. Among them, the development of LED light source and IT technology and the growth of media field have led to the emergence of new lighting methods in lighting design methods. Recently, due to the active development of Shin Kwangwon and the demand for new landscape design, it has been applied to various buildings[8].

2.2. Media

The exterior of the building with the media façade performs a media function that expresses various information and images. Kunsthaus, which opened in Graz, Austria in 2003 [Fig. 1], is a work by architects Peter Cook and Colin Fourier, and has an envelope of 900 m² named <BIX>. The envelope is a work of Berlin's design group, Reality's United, which incorporates architecture and technical visual messages[9].
At night, the blue outline of the building is blurred, and a variety of images and texts are dynamically displayed on the low-resolution screen, allowing you to enjoy stunning scenes from across the river as well as throughout the city. "It was developed as a tool for vigorous communication between buildings and their surroundings, content and external perception," explains the architect. BIX is a new media considering resolution, scale, format, and urban location. This architecture, which combines architecture and design software and media technology, demonstrates that architecture can become a new responsive media[10].

2.3. Interactive media façade
The Dexia Tower[Fig. 2], a new urban landmark in the Belgian capital, Brischell, was designed by the Belgian Interactive Art Institute LAb, creating a 'Touch' system for ordinary citizens to design lighting. 'Touch' is designed to allow anyone to control the exterior lighting patterns of the tower through the multi-touch screen in the outdoor control room in Place Rogier in front of the building. Through the interaction between citizens and buildings, existing building lighting[11]. The one directionality of this. This can be seen as a representative example of the possibilities of cattle as an interactive media of the media façade and has become a typical landmark of the city center of Belgium through the unique landscape lighting of the exterior of the building.

2.4. Unique image of urban landscape

Using the beam project, the media façade creates a colorful image of the walls of a building, creating a unique image of the city and creating various added value through it. A representative example of this is Lyon, France [Fig. 3]. Lyon is a four-day light festival using media façade to attract 4 million tourists.

[Fig. 3] Lyon Light Festival, France

Lyon's light festival, using the media façade, shows how the city itself can be beautifully and fantastically decorated with light and lighting, and the highest peak of its ripple effect. The image of the citiescape that they are dragging will be planted in the world. Through Lyon 's case, we can create a unique urban image using the media façade as landscape lighting.
3. Media façade analysis methodology

3.1 Research Methodology

3.1.1. Approach to Concept

The media façade refers to the use of light emitting diodes (LEDs), the next generation display, to decorate the exterior of the building like a large screen. It is a kind of digital signage to utilize large buildings of the city as a media to convey visual beauty and information[12]. It is a new trend of 21st century architecture combined with lighting, image and information technology (IT), and in 2004, it became a new trend of architecture in Galleria department store[Fig. 4] in Apgujeong-dong It is said that it was introduced into a luxury goods store.

[Fig 4] Galleria Department Store Luxury Goods media façade

3.1.2. Access to marketing means

The media façade shows the philosophy of the company. Media arts that cover the entire building express the value pursued by companies that are difficult to express in words. Because it utilizes the appearance of the building in its own building, it can be used to advertise at all times, without the expense of operating costs. Respectively. Because it is easy to remember, it becomes a place of meeting and a resting space for citizens [13].
3.1.3. Access to art

The media façade is thoroughly marketing. However, marketing without stories does not impress people and does not follow advertising. Create a communication tool to express the philosophy or business of a company metaphorically and ask people to communicate, not simply being seen. Let's take a look at the story of the media façade installed on the outer wall of the Sinsa-dong BK building. BK Building is a plastic surgeon. The first question after the media façade was erected was how the clouds, the stars, the fireworks, and the blurring of unknown colors were related to plastic surgery. I watched the running time of about 10 minutes and realized the meaning. The metaphorical nature of nature, such as stars, heavens, and clouds, was put in place in order to give meaning to the principle of such a procedure according to the age of pursuing natural beauty. In addition, despite the busy environment, the BK plastic surgeon's identity was revealed effectively without any limitations. This story is not a storytelling from the beginning to the end, but it is structured in such a way that you can feel the meaning repeatedly with one theme. Perhaps it is due to the local characteristics of the installation. The surrounding area of this building located in the Shinsa station intersection has a lot of traffic and a large number of people, but the number of people watching the building is low while staying in one place. So, it is a story based on images that can be engraved on people's minds as if they are going through for a short time. In this way, the media façade needs a strategy.

3.2 Deriving Type Elements

3.2.1. Add your company's identity

![Fig 5] Kumho Asiana Building
The media façade is the face and mind of the company. As a result, what is shown is delivered to the customer. It should be used as a means to show identity clearly, not beautiful and beautiful. For example, let's look at the Kumho Asiana building [Fig. 5].

Kumho Asiana's public relations marketing is focused on design. The slogan is 'Design the expression of the city' using the media trends in the media façade. It can be said that Kumho Construction's identity and architecture philosophy, which combines architecture and design with a steady combination of items and practices, is well-publicized marketing.

3.2.2. Do not damage the surroundings by lighting

When planning a media façade with bright LED lighting, consider the distance from neighboring buildings, the area of illumination, the distance, and the brightness of color. It should not be snowing by lowering the saturation even if it is flashing enough to interfere with the gaze of the passerby who is passing by, or the color of the passerby in the opponent building, and the movement of the image can be made a little slower than normal. It should become a culture.

3.2.3 Obtain eye contact from inside to outside

The media façade has the purpose of promoting the company by attracting outsiders, but should consider the work environment of internal employees. The best example of this is the media façade of BK Plastic Surgery [Fig. 6].

Unlike most LEDs installed horizontally, they are installed vertically using an extrusion bar to show a unique and sophisticated appearance. The disadvantage of installing LEDs is that it is impossible to
obtain visibility from the inside to the outside. The BK building uses an extruded bar so that the outside can be seen from inside.

### 3.2.4. Harmony with the surrounding environment

The influence of the media façade is no longer simply a means of promoting the workplace. Design has started to become a media art that decorates Seoul. Therefore, the media façade should be made in the form of the surrounding environment, mobility, resident population and the characteristics of the floating population, matching with the commercial area, and urban space media planning that does not harm the beauty of the city. It will be another goal of the company to fulfill the public goal of gracefully painting the gray city and creating a beautiful world.

### 3.2.5. Value as a landmark

Previously, because the media façade was not common, it was a well-made building. The area became a hot topic and the image of the company was strong. But now that it has become a building trend, it is necessary to find a different plan for the landmark's rise. For example, if there is a company building of a similar industry adjacent to each other, it would be a promotional marketing strategy that would be a win-win strategy if they form a union, a relationship, and a town in the planning stage of the media façade.

### 4. Conclusion

In this paper, several foreign films about the media façade in Korea, in the policy context, and suggested ways to sanctify them. That is, Digital canvas using the function, outdoor advertisement, city a multi-angle approach to landscape, I wanted to look inside.

The media façade uses the function of the extended space of the city as an extension of media art, enabling participation and interaction that were impossible before. The city can be an area where people outside the city can freely approach and create new and changing media art works through the open space of the city, online and mobile. Beyond the interaction of humans and the media, we can suggest an alternative way of direct communication between human beings, human beings, urban space and human beings in urban space. It is possible to try synchronicity work through auditory, tactile, etc. beyond the work that is focused only on visual images such as digital images or texts. It is a media art that can utilize the interaction of city audiences with the development of technology. You can breathe.
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