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| 内容記述 | 芸術プロジェクトを実施するため、国際インタグレーテッド・スリープ・メディシン研究所（IIIS）において、芸術と建築の実験的統合を試みたもの。芸術とデザインの研究に焦点を当て、学術、政府、産業間の協調を促進するためのアートとデザインのパイオニアカンファレンス（TGSW2016）において、9月18日に行われた。

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Abstract
This paper reports on research relating to production of the “IIIS Art Project.” In this project, artworks—integrating medicine, art and architecture based on the concept of “Sleep”—were installed at the International Institute for Integrative Sleep Medicine (IIIS) at the University of Tsukuba. On September 29, 2015, a ceremony was held commemorating completion of the IIIS facilities specializing in basic research on sleep. This research building was built as a hub for international research on sleep medicine and science, and is a center for sleep research, bringing together world class researchers in the neuroscience of sleep/waking and related areas. (Note 1)

With the aim of creating a space to stimulate the intellectual curiosity of researchers, five large works on the theme of “Sleep” were installed in the entrance hall, a lecture hall and the first floor lounge at the request of IIIS Director, Professor Masashi Yanagisawa. These works were produced by Tsukuba University instructors in the school of art and design—Professor Nobuo Nakamura, Associate Professor Toshiju Saito, and Assistant Professors Osamu Kato, Yuta Kamiura, and Onoyotonn (Yuko Ono)—each using expressive techniques from their own field of specialization. Assistant Professor Osamu Kato who was specialized in a building design produced a design of the whole artwork and greatly contributed. The University of Tsukuba is unique as a national university because its schools for medicine and the arts are located on the same campus. Making use of this characteristic, the artwork was permanently installed to achieve greater integration of multiple domains. These works were realized thanks to contributions from Nishikawa Sangyo Co., Ltd., Ichihara Hospital and many others.

1. INTRODUCTION

In this project, an effort was made to integrate three domains. In addition to integrating medicine and art, artwork was installed from the architectural design stage. The author participated in this project, carrying out tasks ranging from planning of artwork content to production and installation of works.

The IIIS exhibition became a permanent exhibition, but there is also a temporary exhibition format in the field of public art. The author discovered the possibilities of permanent exhibition through this project against the backdrop of a past record of temporary exhibitions of works.

In recent years, art biennales and triennales have proliferated in all over Japan as a way to promote community revitalization. With the aim of using art to create new resources for communities in depopulated rural areas, the traditional culture of a region is passed down through the medium of art. These works are temporarily exhibited, with some becoming permanent installations, but almost all are removed after the exhibition and the original scenery is restored. In both temporary performance-type exhibitions and semi-permanent exhibitions, the possibilities of art can be brought out by responding to client needs.

2. METHOD

With regard to permanent and temporary installations, this report draws on the paper “Variations of Public Art in Japan” (Note 2) by Kentaro Yagi and Naoki Takeda. Next, it verifies the features based on the IIIS architectural concept, design, functionality, and spatial composition. It reflects on the communication landscape due to the development of the community environment which is a major element of this architecture. Finally, regarding the IIIS Art Project which is the main topic of the paper, it reports on the concept of each work, problems during execution relating to the architecture and art, and the results of the artwork integrating multiple domains, as determined by a questionnaire survey of facility users.

2. Sample Preparation

According to “Variations of Public Art in Japan” by Kentaro Yagi and Naoki Takeda, various changes arose to solve the problems of public art in Japan, which existed in the form of sculpture installation projects from the 1980s to the 1990s, and those trends are compared with this project. Yagi and Takeda describe the following three directions as developments unique to Japan, different from public art seen in America.
1. Realizing an improvement in added value of cities by developing close relationships with urban development projects, so cities and architectural spaces form an integrated whole; 2. Shifting from projects where sculptures and other artworks are installed permanently to projects where works are exhibited temporarily; 3. Building close relationships with local communities through artwork production and even planning/operation.” p.65 (Note 2)

Yagi and Takeda describe a quiet change directed at solving the problems of public art in Japan. As an example of a temporary art exhibition, at the Kobe Biennale 2007, a large shipping container was given to each artist, and they exhibited their works there. At the Nakanojo Biennale 2016, more than 130 modern artists came together, and installed their works using building and locations that had been around for a long time in Nakanojo city. At Tsukuba Art Session: Locality&Magnetic Field exhibition, works were installed to suit pre-existing locations such as ruins and train station parks. These events were the site specific type, where artists exhibit works to suit the site, and works were exhibited at locations and objects which have been around for a long time. This type of exhibition method also has temporary performance elements. A performance element is a temporarily installed element which generates a buzz, and is effective for attracting visitors. When the exhibition period is finished, the original area or building is restored.

In the IIIS Art Project, unlike a temporary exhibition, the artworks were incorporated from the architectural design stage, and the architecture and art were integrated, progressing simultaneously with initial design. The fact that art was installed at the architectural design stage ensured a match between the concepts of the facility and art. As Yagi and Takeda noted, this is “a form of existence that has been very commonplace in the long history of art” (Note 2), and thus the original nature of art manifested itself. Permanent installation improved the added value of the facility. This is a unique feature of this project, and a possibility for public art employing integration of multiple domains.

2.2. Experimental Procedure

IIIS art project

Five faculty in the school of art and design at the University of Tsukuba created large works based on the concept of “Sleep.” To achieve integration of architecture and art, the lifeline and artwork were brought into coexistence prior to completion of the architecture. To ensure no effects on the living environment, the artworks were installed with priority on the most important parts of the architecture. In terms of impact, the artwork helps showcase, both inside and outside Japan, the appeal of Japan’s only national university with medical and art schools on the same site, and inspection/viewing of the works is allowed at present.

(1) Nobuo Nakamura “Dream of a Butterfly” Calligraphy, Glass, W960 cm × H270 cm, 2015
Theme: Once, I, Zhuang Zhou, was a butterfly in a dream. I was cheerfully enjoying myself, flying around to my heart’s content. I did not know that I was Zhou. Suddenly I awoke, and I was Zhou again, without a doubt. I did not know whether Zhou had been dreaming he was a butterfly, or whether a butterfly had been dreaming it was Zhou. But between Zhou and a butterfly there should be some difference. Even so, why couldn’t I tell them apart? Because this was a case of what is called the Transformation of Things.” (Based on the contemporary Japanese translation by Mikisaburo Mori)

Professor Nakamura, whose field is calligraphy, looked closely at the dream consciousness in this passage of the philosopher Zhang Zhou’s classic work. He created a work of calligraphy in which we wrote out this ancient Chinese passage, which has become a symbolic fable, in the ancient letters of the time it was written. This was then placed on a glass door separating the entrance from the neighboring presence space. This work of calligraphy, sandblasted on glass, creates a sense of transparency in the wall which meanders through dreams and reality. On the other hand, arranging large characters on the entire glass wall surface results in a dynamic expression, and people are overwhelmed at the moment they enter the research building.

(2) Toshiju Saito “Dorville,” Ceramic, Iron, W630 cm × H480 cm, 2015
Theme: “You might liken it to the strange, half-asleep time right before falling asleep. Various thoughts float to the surface, vivid images come in flashes... This is the shape of that strange time in the gap between the conscious and unconscious mind.”

Associate Professor Saito’s field is ceramics, and he installed this form between sleep and waking on the wall in the first floor lounge. The left side expresses the time one enters sleep, and proceeding to the right, the work expresses the process of waking up. The earth and glaze are varied to suit the
expression. Looking at the left side, we see the earth has fused, and has a matte, darkish color. The earth material has the characteristic of fusing when it is fired. As one proceeds to the right side, the piece takes on a glittering silver color and a hard, sharp form, thereby expressing awakening. The silver color is achieved using a glaze mixed with platinum. This platinum, which sparkles and glimmers depending on the degree of surrounding light, expresses the movement of the brain and cells of the body from sleeping to waking, and the work almost appears as though it is alive.

The ceramic parts comprising the work were produced collaboratively by the artist with the cooperation of art students, and researchers and office workers in the sleep research building. The aim of the artist was to have many of the people working at the facility understand and become attached to the work, and thus the project was planned and carried out in a workshop format.

Theme: “Like a tender sofa, and yet like a bench all get together and sit on. A daybed made of mattress. Wrapped in black as a silky night.”
Assistant Professor Kato specializes in architectural design, and was in charge of the furniture and interior in the lounge. And, he was specialized in a building design produced a design of the whole artwork and greatly contributed. A chair and table placed by a window. A table with a mirror finish placed directly below in a low-hanging light. And a large sofa placed directly under an atrium. The sofa is designed to be slept on, and is wide enough for a person to lay down. If a person lays down facing upwards, an artwork featuring a peacefully sleeping mother pig and her piglet is flying directly overhead. The result is an extraordinary experience, as though one had entered a dream.
The sofa is made of 100% wetsuit material, and the inner material is 100% polyester, like that used in beds. The filling is a mattress called an airweave, made of urethane foam. The mattress was offered by Nishikawa Sangyo Co., Ltd., which is also involved in research on sleep.

(4) Yuta Kamiura, “revolve,” Iron, W518 × D2498 × H60 cm, 2015
Theme: “A shape which slowly arises, and then sinks, Comparing the rhythm of a day to the path of motion of a square, Iron bars were installed with even spacing at the ceiling part of the entrance hall.”
Assistant Professor Kamiura specializes in configuration design, and he installed a work made by bending flat iron bars, painted black, to the ceiling of the entrance. As one walks forward, the shape of the work gradually changes. It visually expresses the dynamic shape of sleep and waking. The design is very simple and refined, and the theme is communicated clearly.

(5) Onoyotonn “Zoo...Zoo...Zoo...” Polyester resin, W195 × D40 × H70 cm × 4, 2015
Theme: “A mother pig and her piglet, going to sleep and flying off to the world of dreams. A happy time of sleep, gentle breathing and skin touching skin.”
The author creates works based on the theme of pigs, and pigs were selected as the theme for this project too. Pigs snuggle in groups, and live their lives touching skin on skin. When they sleep, they huddle together and maintain warmth with each other's body temperature. When they get nervous, they huddle together, and hope for time to pass. This behavior is especially evident in the relationship between a mother pig and her piglets. A “happy time of skin touching skin” means that at sleeping time, a piglet can touch the skin of its mother for a long time, having her all to itself, and can feel her warmth. This same behavior applies to humans.

3. RESULTS AND DISCUSSION

Questionnaire survey of IIS users
A survey was conducted to determine the attitudes of those who actually use the facility every day toward the environment integrating architecture and art. The survey was administered from June 29 to August 10, 2016, and 35 valid responses were obtained from 65 facility users. We asked all facility users to cooperate with the attitude survey as subjects—primarily researchers in sleep medicine at IIS, but also office staff.
Comparatively speaking, a large number of responses were obtained from women, but the attitude survey was completed at a roughly 50-50 ratio. In terms of age groups, responses were obtained almost evenly over the range from the 20s to 60s, thereby sampling a wide-range of views. Tastes for artwork tend to have biases, but no major biases were seen for sex or age in the questionnaire results.
3-2. Artwork satisfaction and evaluation

In Q3, subjects were asked about their overall satisfaction with the artwork installed in the facility. More than half of the respondents indicated satisfaction, either satisfied (42.9%) or somewhat satisfied (42.9%). Those who indicated “neither satisfied nor dissatisfied” were 5.7%, and those indicating “somewhat dissatisfied” were 8.6%. Therefore it was not possible to attain complete satisfaction.

3-3. Architectural environment

A survey was conducted to determine whether a community environment has been smoothly created by producing a communication landscape born of the integration and interactions which are distinguishing features of the architecture. This also revealed whether artwork inevitably has an effect on the living environment. With Q5, 35 responses were obtained to a question asking about the degree of applicability to the subject's own thinking.

1) The artwork stimulates my intellectual curiosity.
   Excellent 12(34.3%) Good 14(40.0%) Average 5(14.3%) Poor 3(8.6%) Very poor 1(2.9%)

2) It is an environmental space where I can exhibit my skills and abilities.
   Excellent 11(31.4%) Good 14(40.0%) Average 9(25.7%) Poor 1(2.9%)

3) It is an office environment where I can easily concentrate on work.
   Excellent 13(37.1%) Good 13(37.1%) Average 6(17.1%) Poor 2(5.7%) Very poor 1(2.9%)

4) The open environment leads to good human relations in the facility.
   Excellent 11(31.4%) Average 4(11.4%) Poor 3(8.6%)

5) In the future too, I would like to work in an environmental space integrated with art, like the current workplace.
   Excellent 19(54.3%) Good 10(28.6%) Average 6(17.1%)

6) It is a pleasant environmental space for living, even if artwork is present.
   Excellent 25(71.4%) Good 8(22.9%) Average 2(5.7%)

4. CONCLUSIONS

In previous buildings of university institutions, pictures were hung on walls and sculptures were placed on pedestals, but the unique feature of this project is the integration of architecture and art at the architectural design stage, and the direct installation of artworks onto the building’s walls, ceiling, windows and so forth. As described in the comparison with changes in public art in Japan in 2 above, it was possible to endow both the facility and art with permanent artistic value because their concepts were integrated and artworks were installed at the architectural design stage. In this way, it was possible to approach the unique changes in public art.

One view gleaned from the questionnaire survey was that “The artworks are stunningly beautiful, providing inspiration and calmness in the uncertain ‘world’ of scientific research,” and this shows that the artworks are a familiar part of the living space, and are in people’s minds. Thus we have approached one step closer to creating a space which stimulates the intellectual curiosity of researchers—the purpose of IIIS. The open space which was the architectural concept is also useful for interaction in human relations. The result of this project was a demonstration, based on the questionnaire survey, of the possibility of public art based on integrating multiple domains.

As an issue for the future, although the questionnaire survey revealed favorable views, there were differences in attitudes toward the concept between the expressive artists and the facility users. Some expressed the opinion that “art is a waste of space,” and due to differences in attitudes, artworks can be psychologically unpleasant for some users. To ensure that public art is accepted by everyone, it is important to put the perspectives of facility users first. Before starting architectural design, there was a need to conduct an interview survey regarding research concepts with facility users. However, if the artists’ intentions are not incorporated here, the uniqueness of the expressing person and the architecture will be lost. Public art integrated with multiple domains requires bringing together the concepts of facility users and artists, and engaging in expression so that biases are not created in each other’s lines.

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