

# Expanded Global Activities through Exhibitions of col.lab Exhibits and Branding Research at Oversea Museum

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## ABSTRACT

Color is closely related to photography, printing, and optics, which have been research fields of TPU since its foundation. Color is also one of the fundamental elements of art. In such a background, our project have held between exhibition including workshop. and research of scientific view point. Since the category adopted by the University is Type B (global development type), some of the above activities will be introduced and exhibited at museums overseas. Specifically, the representative activities were exhibited at the Emile Kreuz-Seder Museum (Municipal) in Finland. Furthermore, in the foreign country of Finland, we took care to convey Japanese culture from the viewpoint of art and engineering from the ancient tradition of Japan, "BENI".

## 1. INTRODUCTION

This year marks the fourth year since the university's branding activities began. Up to now, the exhibition at the "col.lab" gallery has been diversified and continued once every six months while changing the exhibits. We are also working on less than 20 themes in our research.

In this presentation, we will introduce the expanded global activities through exhibitions of col.lab exhibits and branding research at museum of Finland.

## 2. Exhibitions and workshops at museums

Emile Kreuz-Seder Museum. is classified as an Art and Cultural Museum, found in 1916, It is located about 200 km northwest of Helsinki. and is now managed by the city of Harjavalta, Finland. Fig.1(a) and (b) shows photograph of the entrance of the museum and (b) aerial photograph, respectively. From May 5 to September 8, 2019, the museum exhibited under the theme "Japonism Today."

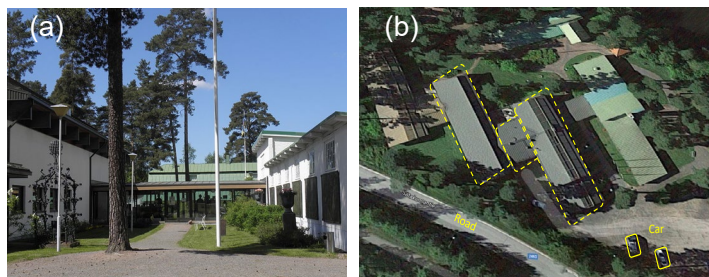


Fig.1 (a) A photograph of the entrance of the museum and (b) Aerial photograph

So far, the following three representative works that have been exhibited at the university's col.lab gallery and the explanation of this project have been exhibited and workshops in a room in a museum. A flyer for this event as shown figure 2 was prepared in English and Finnish.



Fig.2 Flyer of TPU exhibition and symposium in Emile Kreuz-Seder Museum in Finland

Exhibition are 1) Movie of "BENI" was screening (Finnish subtitles) and demonstration by Assoc. prof. Yajima, 2) Interactive camera demonstration of famous painters paint style called as "AI mirror" provided by Prof. Kuhara, 3) Three kinds of large optical illusion color mixing cubes called as "CMY Cube" was presented by lecturer Miyazaki.



Fig.3 Photograph of (a) BENI(safflower) movie screening and (b) workshop on color extraction and dyeing from safflower. Inset fig is demonstration of workshop.

Figure 3 shows the movie of "BENI", which was shown to the general public people, elementary and junior high school students, and Japanese people living in Finland.

For this screening, subtitles were included under the supervision of a Finnish translator and a dyeing researcher. As a result, works that convey Japanese culture, which has a reputation in Japan, could be promoted to foreigner.



Fig.4 Photograph of Pamphlet. Black card is free sample of "BENI" distributed to participants.

Free sample of "BENI" distributed to participants as shown in Fig.4 . High quality "BENI" indicates a shining green color instead of red as shown in the Fig.4 as on black card.. By adding a little water to it, it shows a bright red color. In this workshop, participants were able to experience these phenomena myself by using distributing samples. As the results, It was very reputable.

Participants of this event were not only general Finnish but also elementary and junior high school students and Japanese tours, and their ages and fields were diverse. About 300 color samples were distributed at the "BENI" exhibition, and a considerable number of visitors were obtained at this exhibition in only 3days.



Fig.5 Photograph of interactive camera demonstration of famous painters paint style called as "AI mirror".

Fig.5 shows an interactive camera demonstration of famous painters paint style called as "AI mirror". This exhibition was very well received because each participant's face projected by a camera looks like a picture of a famous painter.

Fig.6 Photograph of three kinds of large optical illusion color mixing cubes called as "CMY Cube"

Three kinds of large optical illusion color mixing cubes called as "CMY Cube is shown in fig.6. The exhibition of the CMY cube was also pick-up in a two-page spread in a local newspaper (SATAKUNNAN KANSA<sup>1)</sup>, in Finland).

### 3. Collaboration between Technology and Art

On of the aim of the TPU branding project is promoting to further collaboration between technology and art on color.

According to this philosophy, The roots of this project, "BENI", which won an award in the artistic cinema area, have made further progress in the activities of this project. It has been successful in scientific research on the mechanism of red coloring, and as a result has been awarded 2019 best paper award of the society of photography and imaging of japan which was entitled "Green metallic luster on the film of safflower red pigment extracted by a traditional method -Approach with Optical Measurements-"..

In the case of CMY Cube, The difference in the appearance (color) of the CMY cube depending on the direction of light incidence is verified by using a lighting dome as shown in fig.7(a) and also shown numbering of lighting source as shown in fig 7(b)

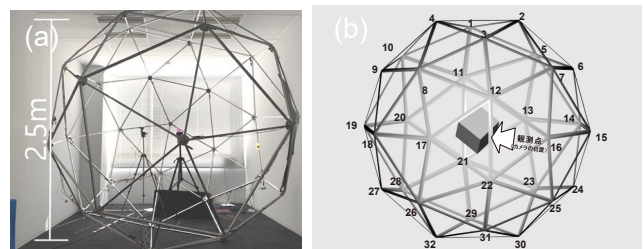
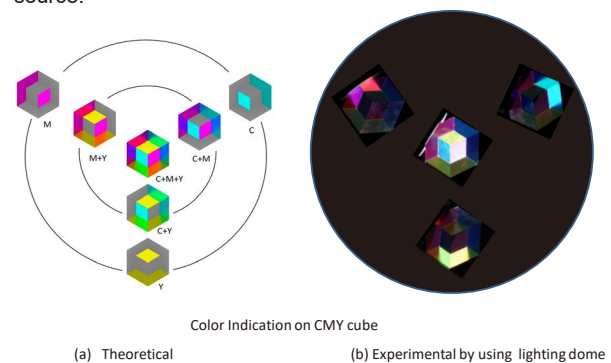


Fig.7 (a) Shape of lighting dome and (b) numbering of lighting source.



Hence, through the exhibits and branding research on the color successfully make the faculties of Engineering and Arts can both conduct studies , which will lead to further collaboration between technology and art for world wide.

- 1) Satakunnan Kanssa is a Finnish language regional newspaper published in Pori, Finland.
- 2) T.Yajima, M.Sasaki, K.Yamada *et.al*, 2019 Best Paper Award of the The Society of Photography and Imaging of Japan.