

Research Visit Report

15/10/2010

Department of Psychology

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1. Theme of study

Synesthetic cognition and cultural differences concerned with colors

2. Research activities

(1) Location Visited

UC Berkeley, Department of Psychology, Palmer lab

(2) Scholars Interacted

Stephen Palmer, Karen Schloss, Bryan Alvarez, Lynn Robertson

3. Research Outcome

(1) Summary of the visit plan

Synesthesia is a phenomenon in which one sensory stimulation leads to involuntary experiences in a second sensory organ. It is said that 1 out of 100 individuals have synesthesia. Although there exists various types of synesthesia, the grapheme-colour synesthesia, in which letters and characters causes color perceptions, is the most common.

During the stay, I will assist the lab members study about cultural differences in synesthetic cognition. Through the discussions with them, I expect to gain some information about the latest studies done in the U.S. and also their ideas concerning it.

(2) Achievements

In the Palmer lab, where I mainly stayed, I read a paper about synesthetic cognition of colour, which led to the discussion with the members. Also, I participated in the meetings held. There, I got a chance to discuss the studies on which they were making researches.

In addition, I cooperated with Bryan Alvarez, an expert on synesthical studies, in his experiments. He was studying a phenomenon observed in a man who feels that letters and numbers have their own personalities. It is claimed that this is one type of synesthesia. Interestingly, when the experimenter present multiple letters (or numbers) at the same time, he feels the letters form one integrated personality, and not that each of them has an individual personality. I assisted him setting up the experiments to testify this phenomenon, including the collection of the participants.

During the period, Bryan introduced me to Lyn Robertson, who leads the field of synesthesia studies, and we talked over general issues about synesthesia.

(3) Further studies

The phenomenon that letters and numbers form a personality is considered to be a part of synesthesia. Furthermore, notions seem to have certain effect on the process they form it. It is possible that another type of synesthesia, with letters and numbers causing a perception of color, has similar characteristics, and thus, there is a necessity to take the effect of notions into account.

In the future, there might be an opportunity where I need to compare the results in Japan with those in other cultures. The personal connections constructed this time should be helpful then.