EXPERIENCING THE CONTEXTUAL ENVIRONMENT WITH SKETCH MEDIA

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1. Introduction

Contextual information, as we believe, is significant for its surrounding environment. It is difficult for designers to capture the exact ambient of the site, even they have inspected several times or done the relevant sketches of the site. The reason of not being able to picture the complete contextual information of the site is because most people seem to have the disadvantages of short term memory. Therefore, sensing the contextual information of the surrounding environment while designers are in workplace is helpful in terms of creating design ideas.

2. Background

The use of these forms of pictorial representation has long been considered to be an essential part of the design process and the more unstructured forms to be related to creativity and innovation in design(Gero and Purcell 1998).

3. Exploration of Relationships

Designers often represent ideas by sketches. These sketches can be used as the approaches for the problems as well as the focuses of the design stages. For them, sketches are regarded as guidance for exploring new designs and problems. However, they can only try to comprehend the concepts of
architectural space but can not experience the physics of feedback within the space.

People can sense the physics of feedback as soon as they are in the space. What are these physics of feedback? They are defined as sunshade, sound insulation and guarding sun from architectural physics in the surrounding environment where people are in. How to deal with the surrounding matters as well as design good physics of feedback with only first hand sketches?

The goal of this research is to explore a possibility of experiencing the surrounding environment by sketches and examine the physics of feedback on site.

4. Reviews

Contextual information is required to be captured as seamlessly as possible through interaction between users and surrounding environments (Kaori and Tatsuo 2005, Schmidt 2000). Computer-enabled artifacts can gather information about the surrounding and the activities of users (Lars Erik, et al. 2003, Sven and Andry 2003). From researches mentioned above, location sensors are necessity for identifying the implicit contextual information in surrounding environment.

5. Media Framework

Our media is comprised of the following key components:
1. Ambient sketch interface is used for sensing the designers’ sketch activities and displaying the sketch information.
2. Context-based server is to analyze the sketches and provide adequate feedback to the designers.
3. When the sketches have been analyzed and the physical feedback system would urge awareness for the surrounding environment to the designers.

7. Conclusion

Designers can make ideas into diagram through sketches. Our media can not only review the sketches but also provide the physical experience in the workplace. According to these experiences, designers can create and enhance the ideas. Our media can immediately gather the contextual information from designers’ sketches and then reflect onto the adequate physics of feedback of the surrounding environment for them.
References


