CULTURE SENSITIVE CONTEXTMAPPING: DISCOVERING THE STRENGTHS OF EASTERN AND WESTERN PARTICIPANTS

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ABSTRACT

Contextmapping - a set of generative design techniques, used by designers to understand the context of their intended users - has been used successfully over a decade with Western participants, both in practice as well as in design education. However, for East Asian participants, the techniques are found not well attuned to their cultural norms and values. For example, in comparison with Western participants, many Asian participants tend to be more modest in expressing their feelings, which requires more supports in contextmapping sessions. In this explorative study we compared differences and commonalities regarding the understanding and application of contextmapping techniques among four groups: East Asian design students (from China and South Korea), an international group of design students (from Europe and America), and two groups of design students from the Netherlands, where the techniques have been developed. In this paper we discuss their behaviour and reflect on four identified culture respective strengths useful for learning and using contextmapping: creativity, autonomy, sensitivity, and effort. Some of the techniques' characteristics are found to fit better with either Western or East Asian cultures, and could be modified to better accommodate the participants' cultural preferences.

Keywords: Contextmapping, cultural differences, contextual user research, design education.

1   INTRODUCTION

The last decade has shown a growing use of generative design techniques by designers that seek to understand the context of use in the early design phase. Among these, contextmapping involves the participation of intended users as 'experts of their own experience', using their creativity to map the contextual experience regarding product use, and to envision future designs or services [12]. Several authors have discussed the role of cultural sensitivities in applying such techniques in non-Western cultures [1, 2, 13]. Others have described differences between Westerners and East Asians in the ways that they think, behave, and express themselves [5,6 and 8]. Some of these differences, e.g., expressing and reacting to opinions, are more attuned to Western modes of thought and social behaviour than to East Asian ones. Some previous studies [4, 10] have focused on analysing cultural attributes of East Asian participants and understanding how current techniques may fail to mobilize the their participation. Attempts have also been made to modify the techniques to forms that are more appropriate to them. But these attempts emphasized on suggesting remedies that deal with East Asian participants' weaknesses as barriers to the contextmapping process. In this paper we report a study to explore and compare the strengths of both Eastern and Western participants in contextmapping sessions.

2   CONTEXTMAPPING ENDEAVOURS

The original paper on contextmapping [11], describes the technique in detail, and has been used as a basis for comparison in several studies over the past ten years. Characteristic elements of contextmapping are an appeal on and support of the individual creativity of participants as well as collective creativity deriving [11]: generative tools, such as sensitizing workbooks, collage toolkits, and model making toolkits have been used to facilitate participants reaching the best ability to express their creativity. Next to that, independent thoughts are expressed and discussed together in group-

sessions. Many of the generative tools have been developed to enhance the participants' autonomy to achieve utterance of experiences, opinions, and concerns.

3   CONTEXTMAPPING AND CULTURAL DIFFERENCES

As the East Asian market developed, manufacturers have come to the insight that merely adjusting the styling of products to an Asian aesthetic does not satisfy their customers. Companies and design research agencies are looking to better understand these customers, but find that the methods that worked in consulting their Western customers cannot be straightforwardly ported to Eastern participants. The methods take Eastern modes of thought and social interaction insufficiently into account [4]. Cultural theories explain some of these problems. For instance, Kwang [7] discusses the different behaviours and attitudes towards creativity between Westerners and Easterners. He asserts that in general East Asians experience difficulties to think, feel, and act in a creative manner in their society. According to him, in a tightly organized and collectivistic Asian societies people tend to act in a 'conforming manner' to keep social harmony. Apart from the society, a case study in China indicated that the education system is influential on the development of one's creativity [9]. Moreover, East Asian social norms and attitudes look differently at self-expression. Western individualistic societies in general value expressing oneself, in which one can expresses feelings and ideas intrinsically through different acts (e.g. speech, actions) to achieve individuality [6]. Actually, instead of expressing intrinsic thoughts of one-self, Eastern Asians feel at ease when meeting expectations of the groups they belong to by agreeing on others. These culturally depended views and reactions have been considered as challenges in order to conduct contextmapping with participants from the East [10]. As a result, when applying contextmapping in the East Asian context, generative tools were modified and redesigned to support Eastern participants thinking and acting 'the Western way'.

But 'high-context' East Asian cultures also hold promise for the techniques: Eastern Asians were found more sensible and skilled in observing relationships between objects and environment compared to Westerners who see objects as discrete and separate from their environments [3, 8]. This nature of being sensitive to the contextual situation can be an added value for conducting contextmapping with Eastern Asians. Instead of adjusting the tools to compensate for Eastern participants' weaknesses in the contextmapping process, we can also look at making use of the strengths of both cultures.

4   CONTEXTMAPPING WORKSHOP WITH STUDENTS

4.1 Approach

With the intention to explore the aspects that participants are good at in doing contextmapping, we executed a study with 84 master students from the Faculty of Industrial Design Engineering, TU Delft. The participants were divided into four groups: East Asian (18); International (21); Dutch-a (23) and Dutch-b (22) according to their cultural backgrounds. Each group followed the same procedures, consisting of a week of sensitizing and a 2-hour contextmapping workshop. The workshop included an interview round and a collage making and presenting exercise, following the description of contextmapping [11]. Four researchers facilitated the sessions simultaneously, following the same script. Due to the limitations of the educational setting, the group size was tripled as well as the length of the tasks used in the workshop was condensed compared with the format of contextmapping [11], but this format has been in use in the educational program for about ten years. After the workshop each participant filled in an open-question questionnaire to report his or her experiences of the sensitizing week and during the session. The collected qualitative data included observation notes, transcriptions of the sessions, interviews of the facilitators, collages made by participants, and video records. They were analyzed 'on the wall'[11]. Six design teachers were invited to review the collages.

4.2 Insights

The observations revealed major differences between East Asian group and the three Western groups, and only minor differences between International and Dutch groups. In this study, we examined the strengths of the East Asian group and the three Western participants groups respectively. From the observations and literature findings we identify four strengths; two discovered from Western participants (creativity and autonomy) and two discovered from Eastern participants, are discussed below (sensitivity and effort).

4.2.1 Creativity

In contextmapping, generative tools are designed to assist participants to share their contextual experiences regarding product use, and come up with possible design ideas. The outcome highly relies on how much the participants are used to creative expression. In the study we noticed that Western groups in general acted in a more creative style compared to their Eastern counterparts. This strength of the Western groups was reflected on both the artefacts they made and the atmosphere during the group discussions.

When examining the collages made by Western and Eastern groups, those of the Western groups were considered as 'more creative', 'personal styles' and 'diverse'; comments to those of the Eastern Asian group were 'modest, 'restricted' and 'with many white spaces (unfinished)'.

Figure 1. Some collages made by East Asian group (left) and International group (right)

In addition, during the workshops the dynamics between the East Asian group and other three groups differed greatly. Participants from former group in general seemed to be constrained and disciplined in behaviours, whereas Western participants were found to be relaxed and proactive. For instance, the East Asian workshop remained silence except when the participants were asked to make utterances. In contrast, the Western workshops were filled with continuous chats and discussions between participants and with the facilitator.

4.2.2 Autonomy

The activities in contextmapping require participants to think and express freely, and autonomous acts are appreciated. In this study, Western participants were found more independent in terms of tasks completion and self-expressions during the workshop. For example, when asked to make a collage of their experience, most of the Western group members started cutting off images and words once the facilitator handed out the materials. Most of the Asian participants were rather waiting for the facilitator's instruction for the next step. Even after an additional explanation, the participants hesitated, instead of starting trying things out.

The differences were also found in the ways of group discussion. In the Western groups, for instance, a discussion often began with a topic led by the facilitator, and then it gradually turned into a free style during which the participants shared thoughts spontaneously. However, the discussions in the East Asian group were always in a facilitator-led fashion, during which every participant was persuaded to give opinions. Few spontaneous reactions were observed. And often, the facilitator asked closed questions such as 'Do you have a similar experience?' in order to get responses from the participants. Accordingly Western participants showed higher degree of autonomy.

As expressing autonomy and freedom is more appreciated in Western societies, we expected that Western groups were able to complete the tasks and share opinions independently. The Asian participants were relatively dependent. As a result, the facilitator gave many encouraging signs (e.g. 'Come on, you can do it.', 'Don't worry, just give it a try.') during the workshop.

4.2.3 Sensitivity

Although it took more time to get East Asian groups started making collages as discussed above, the contents of the stories presented by East Asian groups were rich. They indicated the connections between selected images and words used in their collages. And also they used the connections to explain their own experiences. All the presenters described their collages in a storytelling style, including what happened about the chosen elements and why they mattered. In comparison, information collected from Western groups contained much less contextual information. Most of the students tended to talk about fragmental stories, such as liking or disliking a single object (chosen from provided materials), in a summarized manner with few links to personal feelings and emotions.

Two stories with the 'body care' topic of 'feeling clean', illustrate these differences:

'I drew a lot of arrows for a lot of things I didn't like (regarding feeling clean), such as a mascara. It sometimes leaves stains on my face. I like fresh orange juice because it makes me feel clean. I can start my day from a nice breakfast with a glass of orange juice. And I used this (image), a girl with dirty hands. Because when you are young, you probably show your dirty hands to your mom with proud, but now I don't like my hands dirty anymore…' [Dutch participant]

'To me, feeling clean is not only physical but also mental. I want to find a place to do exercise, whenever I feel exhausted, annoyed, or if my mood is not very "stable". That's why I used some beautiful scenery pictures where could be great for doing excises, and with fresh air and aroma showed in these images…Eventually I would become sweaty and not clean, but my mind will be opened up and I'll feel fresh afterwards…' [Chinese participant]

For most Asian participants in the group, the collage was a new format of creative expression that they were not familiar with before. The feedback collected from the participants after the session surprised us. The Asian group was more positive about using the generative tools than we had expected. Although some of the students had difficulty getting started and therefore requested for examples, most of them found the provided images and words were helpful for expressing feelings and thoughts. In contrast, the Western participants felt collage was less helpful. The sensitivity to the contextual factors and the ability to seek relationships among objects were found to bring the Asian group an advantage in reporting.

4.2.4 Effort

Contextmapping intends to involve users as co-designers [11]. To achieve that, participants are invited to complete a one-week sensitizing exercise in a workbook (for about 10 minutes per day) and then join a two-to-three-hour generative session afterwards. Consequently, it requires much more effort from the participants than conventional user research methods such as interview and questionnaire. In this study, the willingness to complete regardless of effort was obviously observed in the Asia group.
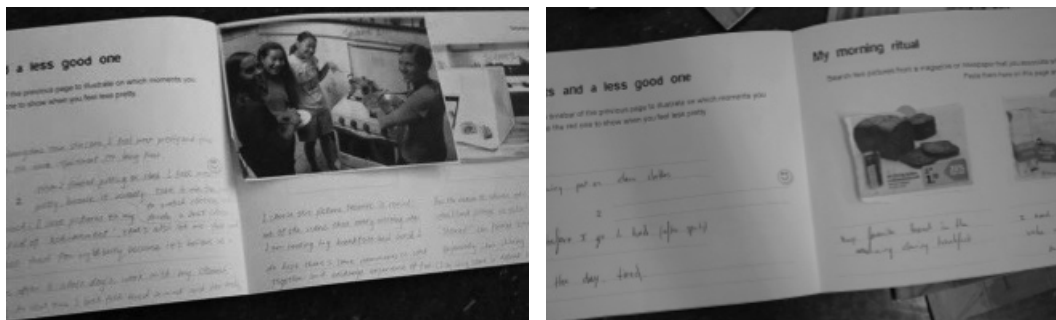

Figure 2. Workbooks filled in by a Chinese participant (left) and a Dutch participant (right)

High involvement was first found in the completeness of the sensitizing booklet, in which only one Asian participant did not finish it. In comparison, ranging from four to six of the participants of each Western group handed in uncompleted workbooks. Next to that, a few common characteristics were found from Asian students' workbook results. Specifically, all pages were filled in with both texts and drawings as suggested in the provided examples and most of the page contents were well organized, neat and clean.

Besides, we found that Asian students had a stronger wish to complete the tasks in the best quality in general, and therefore they were willing to put more effort in the workshop. They took more time than

their Western counterparts to think carefully and organized their thoughts before conveying them in collages. Consequently, they were mostly not able to complete the task within the given time.

5   DISCUSSION AND FUTURE WORK

In this paper, we studied the respective strengths of Eastern and Western participants in dealing with generative tools in contextmapping. These strengths are considered as important values that can positively support conducting contextmapping. Our experiences so far have shown Eastern Asian and Western participants required different forms of supports on these values.

As aforementioned, the current generative tools used in contextmapping have contributed to the facilitation of creativity and autonomy. Our study showed that the current tools and process led all the participants take the first step to map and talk about their experiences. The Western participants were able to quickly adept to the generative tools, whereas Eastern Asian group required additional facilitation. This indicates that the efforts on empowering East Asian participants' creativity and autonomy are important and timely. Furthermore, inspired by the richer outcome from the Asian group, their sensitivity to contextual information was found to be beneficial. Coupling with the limitation in contextmapping endeavour discussed earlier, it reveals the new direction of enriching experience stories in contextmapping. In our future studies we should not only ensure participants' utterances, but also look into the qualities of their stories. We believe there is room for designing new generative tools and extensions to support rich story building for both Eastern and Western participants. Last but not least, contextmapping outcomes seemed to be influenced by participants' effort. In what ways we can keep participants motivated in putting effort in the study should not be neglected.

All participants in this study are design students, so can be expected to be more at ease with creativity exercises than other people. We hope that our insights serve as a lens to help us learn from non-designer participants. We also acknowledge that the participants in this study are not 'representatives' of their cultures as a whole. Nevertheless, we expect that these insights form a starting point to improve the way we facilitate participants of different cultures.

For the future studies, we plan to develop and evaluate a set of new generative tools, especially to explore how to support participants in building rich stories that are valuable for designers to come up with design concepts.

6   CONCLUSION

Generative techniques aim to bring out the strengths of participants and attenuate their weaknesses, in order to optimize their participation. Our experiences in this study confirm cultural theory that describes creativity and autonomy as Western strengths, and sensitivity and effort as Eastern strengths. Previous research to 'port contextmapping to East Asian cultures' emphasized the importance of tuning generative tools to support Easterners at the Western strengths of creativity and autonomy, and have discussed mainly the quality of the *process* (do participants feel at ease, are they taking part), but the qualities of the outcomes, the *content*, were less discussed. Inspired by participants' strengths through a cultural lens, we believe there is also room for contextmapping development in the West to help participants tell rich stories. Also there are opportunities to make use of the Eastern strengths to adapt contextmapping for Asians.

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