Designing with and for others

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Abstract The paper argues that as designers are increasing designing with others and design for others it is important for them to be skilled in intercultural communication and be aware of the effects of their practices, including the ways others are represented in the objects they produce. We will use an international project to upcoming designers' reflection on their practices while working with others and designing for others. We conclude that although the project provided them with an opportunity to experience working across cultures it is questionable as to whether they gained an understanding of the principles that contribute to enhancing intercultural communication.

Keywords Intercultural communication, Cross-cultural collaboration

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1. Introduction

As globalisation continues to impact on the organisation of product design, designers are increasingly designing with 'others', for example when working in cross-disciplinary product development teams; and designing for 'others', such as users and/or clients in other countries.

2. Designing with Others

Designing with others can be understood when designers are working in cross-functional teams (Hall, 1997; Kidder, 2005) with members from different organisational functional departments or in cross-disciplinary teams with members with different disciplinary backgrounds (Poggenpohl, 2009) or in intercultural teams in which members are distributed geographically in different organisations and even countries (Eppinger & Chitkara, 2006, 2009; Marcus, 2009; Packman & Casmir, 1999).

The shifting trend to outsourcing manufacturing has contributed to the geographic distribution of design teams and to the dispersal of design processes. Companies such as Boeing, Philips, Siemens, Nissan and Ford have restructured their operations to implement outsourced manufacturing (Hoppe, 2005; Kasarda & Rondinelli, 1998; Poltrock & Engelbeck, 1999; Shirouzu, 2008; Valcourt, 2008). For example, 90 percent of Philips's appliances are produced by subcontractors located around the world (anonymous, 2006). For instance, its Sonicare Elite 7000 electronic toothbrush is manufactured by a workforce that is distributed among 11 countries (Hoppe, 2005).

Engardio and Einhorn (2005) provide examples of consumer electronic companies, such as HP, Nokia, Nikon, Canon, Sony and Apple, who engage other companies to undertake the majority of their product development. Thus, product development in these companies is often cross-organizational. For example, the Apple iPod is manufactured by subcontractors who source components from around the world, which in turn are designed by other companies, such as PortalPlayer (Leonard, 2005). As a result companies are trying to distinguish where the product is being 'designed' as opposed to where it has been made as illustrated in Figure 1.



Figure 1 Designed California and Manufactured in China

In any of these instances designers working with other team members will be engaged in intercultural communication. The Design Management literature identified communication (e.g. Brown & Eisenhardt, 1995; Hart, 1995) and the ability of designers to work in cross-functional teams (e.g. Borja de Mozota, 2003; Chirumalla, Bertoni, Aditya, Johansson, & Bertoni, 2013) as important factors impacting on the successful execution of design processes.

3. Designing for Others

Following the work of Bourdieu, du Gay, Hall, Janes, Mackay and Negus (1997, p. 62) stated that: "Designers are key cultural intermediaries" and in this role they "play an active role in promoting consumption through attaching to products and services particular meanings and 'lifestyles' with which consumers will identify." Thus, as they are involved in designing for others (i.e. clients/consumers/users), designers need to develop an understanding of how the others, who consume these products and services, are making meaning from these.

According to du Gay, et al. (1997, p. 62), designers are not just designing functions they are designing "symbolic goods and services". Again this is closely related to how we understand culture and how we can make a sense of how artefacts are informed and are informing 'culture'.

One implication is that "meaning is constructed through cultural practices" and this is applicable to not only those consuming the products and services but also for those who are actively involved in production of these products and services such as designers. Designers "are concerned to create an identification between producers and consumers through their expertise in certain signifying practises" (du Gay, 1997, p. 5).

4. The Research Context

The Global Studio (http://theglobalstudio.eu) was developed as a response to shifting trends in manufacturing (Bohemia, Harman, & Lauche, 2009). It is delivered using a blended learning approach with a combination of online learning and face-to-face teaching. One of the key ideas within the Global Studio is to link student teams across the globe in designer and client roles to undertake a design development project in order to practice working with international colleagues. The roles of client and designer are described in more detail in a later section of this paper but it is important to stress that collaborating students are codependent on one another's inputs (Bohemia & Ghassan, 2012, p. 113). Web 2.0 technologies, such as WordPress and Skype, have been incorporated to facilitate communication between the students.

The activities within the Global Studio require students to act as designers to familiarise themselves with the local culture in order to respond to a design brief developed by their client. This necessitated intercultural interaction that is based around and integrated with student's project tasks and their assessment.

Both timing and length of these projects varies from project to project. For example, the length of the shortest project lasted for 6 weeks and the longest project lasted for 16 weeks. This time is inclusive of when students are introduced to the overall project and the online environment which is done during the first week, and the last week is used to conduct synchronous presentations between the paired student teams from across the partner universes. An example of a weekly project schedule is provided in Table 1.

Table 1 Weekly student teams activities p	performed as Clients and Designers.
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week	Client Roles	Designer Roles			
1.	Research potential directions for the project. As the client you will undertake research into the theme (festivals etc) in order to inform the brief. Get to know your collaborators via Skype and project site! Provide information about yourself on your project site and develop a logo for your team.				
2.	Provide your designers with the first draft of the design brief	Review design brief and ask for clarifications			
3.	Provide designers with the agreed design brief including associated visuals / photos / videos				
4.	Provide feedback to designers on their initial concepts	Develop 3 individual concepts addressing clients' design brief			
5.	Provide feedback to collaborators on their refined concepts	Develop refined group concept addressing clients' feedback. Provide 2 potential concept variations.			
6.		Supply to your clients with agreed deliverables. These should include: technical drawings, instruction on how to assemble the model, description of how the proposal is distributed, used and disposed or re-appropriated			
7.	Construct proposed objects (video this process and take notes in order to provide a critique to design collaborators)				
8.	Evaluate the design collaborators' concept validity. Organise a photo shoot of the constructed object. Develop a maximum 60 second promotional movie of the product used by its intended users (using prototype which you have constructed), and provide feedback to collaborators: through 4 minutes video which needs to include: 2) outline in what areas the design missed 3) addressed the brief criteria outline in the design				
9.	Provide feedback (via Skype / videoconference) to your collaborators in regard to their proposed design concepts	Respond briefly to client video. Submit 1500 words individual reflective account on what strategies you as a designer have incorporated into your practice to address contemporary cultural influences.			

Since its launch, the boundaries of the Global Studio have continued to expand through the delivery of unique teaching projects with the collaboration of leading international academic and industrial partners (Bohemia & Davison, 2012). The Festivals, Fairytales and Myths project referred to in this paper is one of these initiatives. We will use this project to examine the practices and reflection of upcoming designers in relation to the design with others and designing for others.

5. The Festivals, Fairytales and Myths project

The Festivals, Fairytales and Myths project was a nine week long international collaborative project undertaken during the 2011/12 academic year (January–March) between six universities located in the Japan, Korea, China, UK, France and USA. Exactly 150 students divided into 40 teams (see Table 2) and 12 supervisors have participated in this international project. This was the 9th project undertaken within the Global Studio. The students participating in the project were all studying in the creative industries; however, students within each of the institutions were undertaking different degrees and different levels of the study. For example, the project incorporated students from: product design, transportation design, craft design, design management, multimedia design and graphic design and students from first year undergraduate to Masters level programmes.



Figure 2 The Global Studio 2012 collaborative partners

Students in the projects undertook a dual role, as clients and as designers for their counterparts located at other universities and their counterparts did the same for them. That meant that every student team had the responsibility of defining deliverables and outcomes. The teams had to deliver a proposal to fit the project brief outlined by their Client group. Although, a master project schedule was provided for all the participating students outlining weekly deliverables (see Table 1) every team was responsible for documenting their weekly progress and associated information on their dedicated project websites. The client and designer roles are outlined below. The project provided students with an opportunity to investigate their own and their collaborators' cultures in relation to Festivals, Fairytales and Myths.

6. Client Roles

The students tasks as Clients was to commission designers to provide them with a design concept of an item, which either promoted and/or celebrated a local Festival event, Fairytale or Myth. It was their responsibility to research and identify specific local practices associated with a Festival, Fairytale or Myth and to provide their collaborators (designers) with a design brief. This brief was meant to be informed by the client's research. When describing a festival, for example, students were encouraged to touch on the following points: how is it 'regulated'; how and by whom it is 'consumed'; how and by whom it is 'produced'; how is it 'represented' and 'circulated' in for example in media.

In this role, as clients, they were also responsible for constructing a physical model that was be based on the proposal developed by their designer group and guided by clients brief and feedback.

7. Designer Roles

As a designer, students were asked to respond to a client design brief. During the early stages of the design process they were provided with a chance to clarify the tasks with their clients before they finalised the briefs. They were required to propose a design concept of an item, which either promoted and/or celebrated the Festival, Fairytale or Myth as specified by their clients. As they were addressing issues in a different cultural context, they were encouraged to use their clients' local expertise to provide them with information in order for them to successfully address the given issue. As designers, the students tackled very diverse projects set by their collaborators within their client design briefs. These ranged from providing a safety product for music festivals, to promoting science festivals, to promoting a festival celebrating Charles Perrault, as outlined by one of the designers:

[clients] brief was asking us to design a mask based on a fairy-tale created by Charles Perrault for a festival celebrating his stories. They wanted to advertise the fact that Perrault was the creator of these stories not Disney or Brothers Grimm who the rest of the world associates them with. So by creating this opera styled mask we were creating an authentic representation of the tales produced by Perrault and everyone attending would need to acknowledge this as it was also their ticket. (re1F)

8. Data Collection

Data that informed the study were collected from student via surveys, project websites, and reflective essays. Surveys were collected at midpoint and at the end of the projects (see Table 2). For this project the surveys were made available to participating students on online. The surveys consisted of questions, most of which included Likert-scaled items, on perceptions about the activities at various stages of the project, including tasks such as writing the design

brief, virtual communication, designer-client interactions, and cultural awareness. Students were prompted to qualify each of their answers by adding text. The questionnaire also included open-ended questions.

In addition, groups of Masters students studying at the English university were tasked to follow two of the paired groups to analyse their interactions using the concepts of 'identity', 'representation' and 'othering'. Comic strips were used by these students as one of the ways to illustrate interactions between the distributed teams.

The total number of retuned survey questionnaires at project midpoint was 48% (n=72) and 42% (n=63) at the end of the project. Compared to previous return rates these numbers were relatively low. This might be attributed to the fact that in previous years student surveys were distributed in a paper format during the classes, rather than online as for this project. There were no surveys received from students located at the USA university as that class withdrew from the project towards the end. Despite this, a number of groups located in the USA submitted their final design proposals.

2011/12 Festivals	Japan	Korea	China	England	France	USA	Total	
Number of groups	3	6	6	20	5	6	40	
Number of students	6	21	25	60	19	19	150	
Returned number of surveys, mid project	5/83%	9/43%	17/68%	27/45%	12/63%	2/11%	72/48%	
Returned number of surveys, exit	4/67%	9/43%	21/84%	25/42%	4/21%	0/0%	63/42%	

Table 2 Number of surveys received from students participating in the Festivals, Fairytales and Myths project

9. Analysis

We will use this project to examine the practices and reflection of upcoming designers in relation to the design with others and designing for others.

Throughout the project the students were 'actively' constructing their particular identities. For example, in their profiles they described themselves as being 'creative' or 'energetic' and in many instances getting into a trap of stereotyping oneself in these descriptions and accompanied photos supporting specific images of self-representation of for example a 'professional' designer:

I found it hard to make my profile, as I wanted to be professional but still show my enthusiastic personality and funny side. Getting the balance right gave me the chance to get used to making a profile for myself when working with different people, consultancies etc. in the future. (re15F)

The very start they were asked to provide an introduction about themselves on their specific project sites. They were also asked to develop a logo for their teams. The following explanation for the symbolism behind their logo (see Figure 3) was provided by a student in France:

I designed the logo after our group brainstormed on what could be a strong French symbol with historical and mythical value. We chose the name Les Arcs, which means 'The Bows' because it has several connotations. Firstly it ties to Jean D'Arc, who was a very famous

French female saint, who lead the French armies in the hundred years war under the guidance of God. She symbolises French fortitude, rebelliousness, myth linked to historical events, and religiosity. Also, Arc means arch, for example, the Arc de Triomphe which is a very famous Parisian landmark. And finally, the bow and arrow symbolises battle, unity, rebellion, and appears in many mythical stories in many cultures. Visually, the two bows and their arrows create a French flag by using red and blue colouring with the white space separating the two. For us it represents our direction and French connection to the project brief we wish to achieve with our [English] counterparts. (WPg1F)

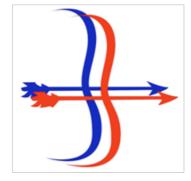


Figure 3 of Les Arcs team's logo

10. Designing with Others

For most if not all students this was the first opportunity to work with peers from outside their institutions and programmes. Most students indicated that they liked this component, although, many students commented

that working with students from other countries including other design programmes was at first daunting:

At the beginning of the project the prospect of working with foreign clients seemed a somewhat daunting task. However after completing this project I am slightly more confident at the thought of repeating this sort of project in the future. I feel I have learnt a great deal in terms of cross-Cultural communication. (re6F)

They also commented that the difference in thinking, values, approach, styles, media, views and understanding these students brought to the project made it interesting. They also found how their collaborators reinterpreted their design briefs interesting and in turn how they reacted to proposed designs intended for their cultural context as outlined by these comments:

The element of this project that I enjoyed the most was seeing how students from another country and a completely different cultural background would choose to interpret our design brief, what ideas and designs they would generate and how they would develop these ideas. It was also interesting to see how they interpreted our ideas and how they felt our designs would fit into a traditional Japanese festival. Additionally I think it was interesting to see how they presented their design ideas to us and what media they made use of to do this. (reM15F) Overall, I felt this project was very interesting and a clever idea, to get teams of students to

work together and not let world location hinder creativity, ideas and inspiration. It was a great experience which offered a lot in terms of culture and views into how other teams and people work, and also how teams of people who are culturally different and from different backgrounds, can work together and come up with a good design outcome. (re4F)

In many instances students as clients were selecting their themes and constructing their design briefs with a particular solution in mind:

Another thing I will keep in mind for further similar projects, is who I am writing a brief for. We wrote our brief completely from our own perspective, and I would dare say that they did the same. Neither team really considered who they were asking to accomplish the task, but instead wrote a brief that they would enjoy working to themselves. As designers all of us also had a clear idea of what we wanted, but did not really share this with the other team as well as we could, in order to leave them more freedom. I feel that this "freedom" was a bit false however, as both groups had an idea in mind, that they tried to direct the designs towards, without fully explaining exactly what they really wanted. It would have been interesting to see what the outcome would have been had we given them our initial idea as a starting point. (reN15F)

At times, the student mode of communication with their counterparts led to exclusion of some members from the conversations which impacted on them negatively as outlined by this student:

Although they did provide files and feedback through the emails they were not uploading anything on the blog or contacting me and the third group member. There wasn't a reason for this but it made me feel disconnected from the project, and didn't allow me to be part of this stage of the project. (reC14F)

11. Design for Others

During the project students were designing for others in terms of the clients setting design tasks including proposed end consumers. Through the project the students needed to negotiate with their counterparts what it was they anticipated and whether the proposed design solution(s) would address clients anticipated outcomes outlined in their briefs and outlined by this student:

The collaborative project with [...] University has proven to be one of the most diverse and stimulating modules that we have or I have encountered as a design student. It has opened my eyes to a whole new perspective on design as a process and how different cultures and media can be ambiguous if not fully defined by set outlines agree by all. Being a Chinese University, the obvious hindrance is the language barrier as neither group had an understanding of one another's language on even a basic level and therefore meant that information at times caused misinterpretation. On the other hand it has helped me to progress on a level such that, I now can be critical when presenting work by understanding how to minimise ambiguity as designers to manufacturers to clients all across the globe. (re6F)

Most students found it useful to design for other cultures as it provided them with an opportunity to move beyond their immediate context:

... as far as culture is regarded, I feel that it is projects like these that can a do require us

as designers and people to come out of our own 'little bubble' and truly appreciate others principles and values. (re6F)

They also liked the opportunity to design for consumers in unfamiliar cultural settings:

The festivals group assignment has been an experience different to most university projects I have done, with both ups and downs. The main aspects differentiating it were the difficult communication, doing teamwork across a distance, and the very unfamiliar culture that we were designing for. (rep6F)

We can learn from other cultures. In this project we are made to design for one. This means we have to put our design practice in that context which was challenging. It is good to learn about different materials, processes, craft forms, ideas and philosophy. It has introduced us the system of globalised design. (q5me18F)

The activities undertaken by the students within the project as clients and designers in collaboration with their international counterparts afforded the students with learning opportunities to experience and reflect on their experiences of working with others and designing for others. Through this exposure they began to appreciate some of the challenges related to this work environment but also how the learning gained from the project could improve their design processes and ultimately their design outcomes as articulated by this student:

Within design I see society and culture as the main driver for products, the ability to fully encompass a knowledge for someone else's culture will make you a well rounded, better designer who creates more effective designs that have an impact on peoples lives. (reR₇F)

Although, most of the students have undertaken these processes for the first time and found them to be challenging they began to appreciate the others in a different light. They also began identify some of the limitations associated with working at distance:

Advancements in technology allows us to work alongside people from all over the world without having to meet in person, but this project made me question whether this is entirely for the best. It is as difficult to form a relationship or understanding of a person when you do not meet them in person as it is as easy to not make too much of an effort to find out more about the people on the other side. Time restrictions and other commitments makes 'small talk' hard to evoke, paired with awkward time differences. I learnt that working in a long distant team can often make projects take longer than they should, as time difference can mean you could not receive/make a reply till the following day, which can sometimes be problematic when trying to meet deadlines. (re17F)

Overall, students from all the participating universities found it extremely challenging regardless of whether English was their first language.

12. Conclusion

We have used an international project on the theme of Festivals, Fairytales and Myths to examine upcoming designers' reflection on their practices while working with others and designing for others. The international project enabled the upcoming designers to reflect on their practices and to identify how some of their practices might have hindered interculturalcommunication with their counterparts located at overseas universities. For example, they identified how their oversimplified initial online individual and team's introduction have not hindered to build a relations with their counterparts. They also recognized how the design briefs they constructed shaped their designers approach to design, as was the case with students who simply re-appropriated a promotional text from a festival's website, and how this negatively impacted on the designers' ability to provide suitable design proposals.

Although the project exposed students to complexities associated with culture and provided them with an opportunity to reflect on their experiences, as illustrated above, it is questionable as to whether they gained an understanding of the principles that contribute to enhancing intercultural communication. We agree with the students' comment that as this was the first time they were exposed to this type of working environment it would be beneficial for them to undertake a similar project to implement what they learned from this project. We also think that the hands on experiences should be supplemented by providing students with theoretical resources which would provide conceptual frameworks for understanding their experience.

As designers are designing with others and design for others it is important for them to be skilled in intercultural communication and be aware of the effects of their practices, including the ways others, such as users, are represented in the objects they produce.

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