

# CULTURAL STUDY IN DESIGN: IN SEARCH OF A MEANINGFUL APPROACH

Annemiek VAN BOEIJEN

Delft University of Technology, The Netherlands

## ABSTRACT

Does the Circuit of Culture help design students to do a cultural study that is meaningful for their design project? Indeed, it provides a good view on the phenomenon culture, its complexity and how contemporary cultures can be studied, providing an overview and structure of the processes that influence cultural change. However, there are difficulties that need extra attention; (1) clear definitions of the process elements and their interrelationships; (2) a method or possible procedure to carry out a cultural study; (3) guidelines to determine and demarcate the cultural study in such a way that it contributes to the project assignment; (4) examples of how insights from a cultural study can contribute to the development of a design vision; (5) an extra lens to look at culture to distinguish it from the individual and the universal; (6) discouraging the use of the model as a checklist and (7) discussion about the designers' influence on culture and society.

*Keywords: Circuit of culture, design education, design research methods, cultural study*

## 1 INTRODUCTION TO THE TOPIC OF THIS PAPER

This paper presents a study about how master design students can be taught to do a cultural study in the context of their design project. Reasons for this study are the barriers that design educators encounter when they teach design students to incorporate social and cultural aspects in design. From a more than 12 years experience in design education I learned that design students would rather focus on the solution of usage problems and focus on utilitarian values of their designs than finding possibilities and meanings related to socio-cultural values. The design faculty, that is embedded in a technical university, attracting those students and staff who are interested in solving primary functional problems, is an argument to explain this focus. However, there is also a more generic opinion about designers' focus. For example, Boradkar writes *'In design, our present understanding of objects is only partial; it continues to be predominated more by aesthetics and technological concerns rather than social and cultural ones'* [1]. In less technical oriented design schools this may not be true, but in our school extra effort is needed to make design students aware of the relevance and possibilities to cope and play with social and cultural values, meaning and impact of artefacts. This need connects to a growing interest in the design discipline in the social impact of design. The development of methods, such as Socionas [2] and models to support designers to design social consciously [3,4] are manifestations of this trend. An increasingly globalizing world and an increasing number of people who have access to new products, evoke the question to designers how to deal with cultural values and meaning. Which specific values do their products mediate? For example, a mobile phone with an application that offers the possibility to have multiple contact-lists supports the social value of sharing products. This idea elicited from a Nokia study in India [5]. Researchers found that people were used to share their mobile phones with each other. The challenge in design teaching is how design students can be supported in the development of a lens to look at culture. That would help us to overcome the three identified barriers; (1) a weak understanding of the relevance of a cultural study (why), (2) weak understanding of what is culture, a definition (what) and (3) a lack of a systematic approach to study culture (how). One approach to overcome these barriers is to teach design students to use the Circuit of Culture (CoC), developed by the culture theorists du Gay et al. [6]. We applied this model in the sub-course Design, Culture and Society (DCS), which is part of the course Advanced Concept Design (ACD). This paper presents and discusses the barriers and potential for using this model in the context of a design project.

## 2 HOW IT STARTED

### 2.1 Design, Culture and Society (DCS), sub-course in Advanced Concept Design (ACD)

DCS is a sub-course that, together with Applied Ergonomics Exploration (AEE), Cyber-Physical Systems (CPS) and Product Communication and Presentation (PCP), contribute to Advanced Concept Design (ACD), a design course in which students work for one semester on a Concept Design Project (CDP) for real clients, such as Philips and KLM. A design coach supports students for the CPS, accompanied by experts of the sub-courses (see figure 1a). Each sub-course contributes to a specific part and links its learning goals and activities to the CDP. The first quarter is focused on design research, resulting into a design vision for the CDP. For DCS, students are asked to carry out a cultural study, related and relevant to the topic of their CDP. The deliverable is a report, including the research questions, methods & results and opportunities for design. DCS offers 5 lectures and 4 expert meetings in the first quarter, followed by 4 lectures and 2 elective expert meetings in the second quarter. The Circuit of Culture (see figure 1b), explained in *Doing Cultural Studies: The story of the Sony Walkman* [6], has been chosen as a model to understand culture. Students were asked to read the book, attended the accompanied lectures and to attend expert meetings.

### 2.2 Circuit of Culture (CoC), a brief explanation

The Circuit of Culture is a model that can be used as a tool to explore and analyse how cultural meanings, represented by language and artefacts (cultural objects), come about and how they change over time. The development of circuit models already started in the 1970's by Stuart Hall and other members of the British Centre for Contemporary Cultural Studies. In 1986, Richard Johnson published a first version [7]. Cultural theorists, who published a series of books for UK Open University [8,9,10,11,12], further developed this model. The circuit is a metaphor for the interrelated processes that steer a cultural phenomenon. It shows 5 processes that all contribute to the production of culture. The arrows indicate that the processes are influenced by each other, but there is no specific order and hierarchy in the model. The process of 'Representation', is about the development of cultural meaning by language and other means of communication, visually and orally, such as in advertisements. 'Identity', is about how social identities develop, such as the young, dynamic, global consumer expressing personal preferences that are associated with the product. The process of 'Production' is about the creation of the product as a meaningful artefact 'produced' or created by the designer and the company. *In the process, the company constantly seeks to take account and respond to the ways in which consumers are 'appropriating' the products.* [6]. The process of 'Consumption' is about consumers that highly influence the meaning (and related cultural value) of products. It is an on-going process that is not influenced by the designer and producer only. Consumers create meanings that can be observed by their daily practices. The fifth process is 'Regulation', which is about change in social regulation due to new ways of categorization and use of products; for example, the Walkman bridged the private and public context of use, leading to noise-level regulation in the public environments. The model has been developed and applied by mainly cultural theorists or sociologists.

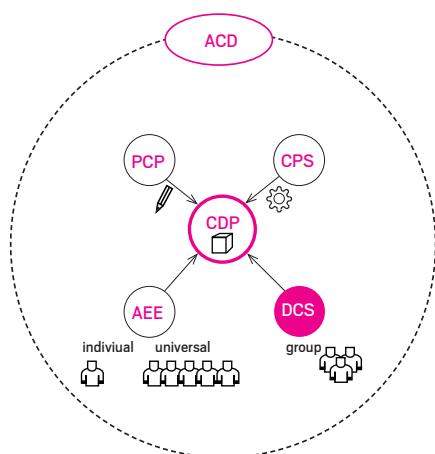
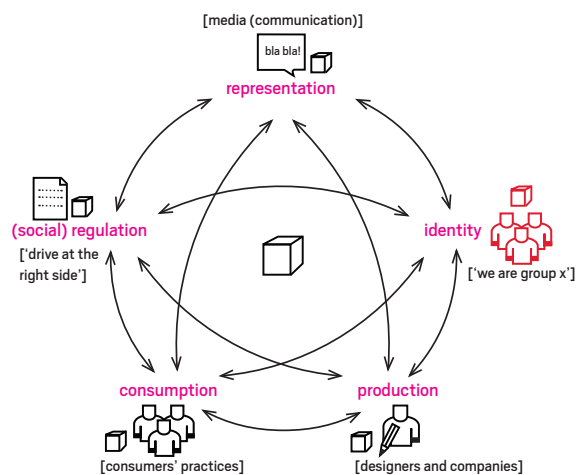


Figure 1a. Advanced Concept Design course



1b. The Circuit of Culture (after du Gay et al., 1997)

### 3 QUESTIONS AND HOW ANSWERS WERE FOUND

For this study the DCS staff wanted to know how the CoC supports designers to do a cultural study and contribute to the development of a design vision. What barriers do students encounter and what opportunities can be identified for the application of this model?

The insights are based on an ACD course evaluation (questionnaires (103 out of 120) and a one hour panel evaluation with 8 students, 4 ACD course coordinators and the faculty education advisor); the evaluation of cultural studies (reports, executed by 24 design teams with 5-6 design students each); online questionnaires (35 out of 128 distributed questionnaires); and an evaluation with the DCS staff (2 hours discussion with 4 design teachers who were coaching and assessing the reports (6 groups each) and a design historian who gave four lectures about the CoC).

### 4 ANSWERS AND DISCUSSION: WHAT?

The insights derived from the four different sources described in the previous section will be analysed and discussed per source and followed by a general discussion and conclusion.

From the **staff evaluation**: The CoC model was helpful to explain and discuss with students how cultural meanings come about and what the designer's roles and possibilities could be to influence this process. For some projects it was very useful, however, for other projects the application of the model was difficult. For example, for a medical assignment about hip-replacement initially students had difficulties to study 'Representation'. Commercials were not available. It took them some time to understand that other forms of representation, such as information campaigns and websites, could be valuable to study too. Also 'Identity' was difficult in the context of the hip-replacement assignment. Students would rather think about utilitarian values, much more and easier than about cultural ones. Understanding 'Identity' appeared to be much easier for a project about human powered vehicles; A comparison of the identity of two different taxi-tricycle designs in two different cities provided various useful insights about how the identities were influenced by their contexts. In a project for an international airport, students paid a lot of attention to 'Regulation'. The meaning of the arrows in the model seized some students; they wanted to determine the exact relationship between 'Representation' and 'Production'. It seemed that they needed some hierarchy in all these processes and interrelationship to keep an overview. The limitation of the model and the book [6] is that it does not explain how designers could use the model. Both, the experts as well as the students, preferred to have also a method or recipe to use the model that help them to do the cultural study in a systematically way. Another limitation or drawback for designers is that the model is developed to study existing cultural phenomena. Designers tend to go away from the existing, because they want to innovate for the future. Therefore, some students had difficulties to see the relevance of, for example, studying the cultural meaning of existing massage products, while they were asked by the company to design a new 'skin care' product experience for European women. Such broad formulated assignments do not help and motivate students to dive into existing cultural phenomenon. It depends on the formulation and interpretation of the design project assignment to what extend the model is meaningful for them. The staff also discussed that the students tend to search for truths, that the cultural study should give them straight answers that can be translated to concrete and measurable design requirements. This need for a complete and clear set of findings that can be translated into applicable design guidelines was also seen by students who were looking for a 6<sup>th</sup> element in the CoC. They seemed to see the model as a checklist for a kind of stakeholder analyses. They did not seem to understand the essence of the circuit of criss-crossing interrelated and dynamic processes. A benefit of the CoC was that next to the meaning of artefacts students were also encouraged by understanding the relevance of the meaning of language. For example, in a project for security checkpoints at the airport, the students found that in the vernacular, people used the word bus stop for the security checkpoint and banana for the security device used by the safety guard. The words had a negative connotation, indicating the meaning these artefacts carry in the specific context.

A somewhat worrying finding was that from the 103 **course evaluation questionnaires**: 53.3% answered that they did not study the suggested literature [6]. Nevertheless, the statement '*the DCS area of expertise fits well in the ACD course*' was answered positively (the average score was 8 on a scale of 10). Also the relevance of lectures was evaluated positively (an average of 8) and relevant for the development of a design vision, although the content of the lectures was valued lower (an average of 7). From the list of suggestions and remarks 3 quotes are useful to mention: '*AEE and DCS overlap,*

*better distinction required*'; *'the idea to separate AEE, CPS, DCS etcetera was quite confusing and became clear after a couple of weeks'* and *'The Sony Walkman example is out-dated!'*

From the **panel evaluation** it became clear that the students needed time to understand and make the link between DCS and the design project CDP, sometimes even after finishing the course.

From the **cultural studies** (reports): 16 out of the 24 reports explicitly used and/or reflected on the CoC, whereof 8 showed that they understood and used the model as intended, 2 more or less and 6 teams did not use the model in the appropriate way. The CoC served several purposes; to generate culture specific research questions, to discuss and structure findings and to identify the role and influence of the designer. As discussed also with the staff, the model was useful if the assignment could be linked to the material culture of existing products from the present and past, but was more difficult to use if the assignment was broad and open. It took extra time to find an appropriate field of study and then students were less motivated to study the meaning giving process of a product, because they did not see how the outcomes might contribute to their CDP. The reports also showed the complexity of the model. One reported *'In the CoC all terms are connected to each other, which does not only make it hard to understand the term, but also to assign a place to a certain research finding.'* (group 1c, p.51). And in another report: *'The text above tackles the five moments (elements) separately but it does not fully convey the synergistic, interactive, and discursive aspects of the model. All five moments overlap continuously..'* (group 7b, p.39). As reported by the staff, the reports showed that some students were searching for hierarchy in the relationships between the CoC elements, focussing on the meaning of the arrows in the model. Some teams used the model as a checklist, which led to superficial outcomes and others stated that they missed a method to use the model. The model did not help to think of and ask specific questions related to context factors such as, for example, technology, economy, politics and climate. The terms used in the model appeared not to match fully with the understanding of designers. Some student teams used a narrow definition for the terms 'Production' and 'Consumption' referring respectively to manufacturing and purchase behaviour of consumers only, because they are used to use these terms as such. Finally, the students were asked to end their report with 'opportunities for design'. This was added to stimulate them to translate findings to their CDP. Probably, due to a lack of time, but also because not all experts were emphasising the importance and because of the complexity of it, a few results reported these opportunities only. Some reported requirements that were too specific and not appropriate in this stage of the design process.

From the **online-questionnaires** we know that most students see the relevance and utility value for their project of a cultural study. Insights from the study are found inspirational. They also qualify the study as complex. A quote that clearly illustrates this is *'Somewhere in the back of my mind, the theories we learned helped me gain some perspective over the feedback of my respondents. It's really difficult for me because my intended target group was 'globalised, creative middle-class'. How are you supposed to design for culture when the world is filled with Diaspora and sub-cultural complexity? I find it paralyzing to get caught up in the analysis phase and I could use some help framing what's an adequate study (because one can really study cultures forever) and how to draw valuable conclusions from the study.'* The same respondent did not find the CoC useful.

In general, most students welcomed a model that helps them to structure their research, especially for the formulation of questions and set up. A small majority judged the CoC as useful or little useful.

The engineering context of the design school (in a technical university) can explain some difficulties to study culture; the design students are educated to systematically develop and determine a design goal, preferably guided by pragmatic guidelines and measurable criteria. Although the model does not necessarily tunes with these designers' wishes, a merit of the CoC model is that it does help them to understand that designers play a role in cultural processes. The complexity of the processes and limitations of the designer's role to influence the cultural meaning of their designs may discourage them to study culture, taking the cultural impact of their designs for granted. Therefore, more guidance is needed to show them what the understanding of the past and the present means for the future, translating insights into a design goal. Despite the limitations of their influence (especially when commercial media is taking over), they should understand that insights from cultural processes help them to develop a design vision, needed to steer the design direction. If there is not a leading theme there is no direction that steers concept development. Then, the designer will take a risk of being squeezed by his/her stakeholders' opinions and convictions.

1. Next generation human, solar and wind powered vehicles
2. Professional care for elderly in nursery homes with services of electro mechanical care agencies
3. Holistic enhancement in hip replacement
4. Relaxing Healthy Skin Treatment
5. Using Gamification principles to create high value engaging retail concepts and brand experiences
6. Security checkpoints at Amsterdam Airport Schiphol
7. KLM boarding 2015
8. Sustainable Catering Solutions



Figure 2. The design project topics and an overview of findings from DCS student report topic nr.1

To summarize, the *barriers* for the use of the CoC in student design projects are: (1) language & definitions; in the design discourse terms such as ‘production’ and ‘representation’ are easily misinterpreted, (2) for open design briefings and specific topics it is difficult to use the CoC: existing cultural artefacts are needed as a starting point; (3) some design students loose themselves in specifying the exact relationships between the elements (the meaning of the arrows); (4) the model does not support designers to translate findings into design opportunities; (5) the model does not provide a lens to look at what is cultural (distinction with what is personal or universal); (6) a method or recipe to use the model is missing, and (7) the Walkman as an illustration is perceived as out-dated. The *opportunities* are: (1) the model supports the discussion about culture in expert meetings, it makes students aware of the complexity of the meaning giving process and the possibilities and limitations of the designers’ influence; (2) the model helps to ask culture relevant questions, to set up a cultural study and to structure and report findings; (3) the outcomes help the design students to form a solid base for design and they contribute to the development of their personal design vision and ideas; (4) the model helps educators to check if the students understand the concept of culture.

## 5 CONCLUSIONS: SO WHAT AND WHAT NEXT?

This paper presented a search for doing a cultural study in the context of a design project. How can design students learn to do a cultural study that is meaningful for their design project? We used the Circuit of Culture as a central model.

Despite the found barriers, I conclude that the overarching Circuit of Culture indeed supports design students in doing a cultural study in the context of a design project. The model provides a good view on the phenomenon culture, its complexity and how contemporary cultures can be studied, providing an overview and structure of all the processes that influence cultural change. However, the study also shows that design students have some difficulties to use the model. Therefore, extra attention should be paid to the following. (1) First of all the definitions of each process and the interrelationships should be well explained, illustrated with -preferably contemporary- examples. (2) Then, a method or possible procedure should be developed that help to carry out a cultural study, paying attention to the development of guidelines to set the boundaries of the study, to develop culture specific research questions and to set up the study. The procedure should also be accompanied with design research methods, such as observation, artefact analyses and commercial studies. (3) Furthermore, It would be helpful if the model goes with some guidelines to determine and demarcate the cultural study in such a way that it contributes to the project assignment, including ‘global’ ones. (4) If we use the model, also examples need to be provided that show how insights from a cultural study can contribute to the development of a design vision or design goal and to a reflection on design concepts. Students should understand that insights from a cultural study do not lead to single conclusions, but that the insight especially can be used for inspiration, to develop one’s own stance and to be able to reflect on the cultural impact of their design in a later stage of the project. (5) Since the model especially points out the processes to study culture and not so much the lens that help to look at what is typically cultural, I

suggest to incorporate socio-cultural dimensions. Since our student designers are used to look at the world from a more ergonomic perspective, paying attention to utilitarian values, some extra effort needs to be made to help them to look at cultural values. The socio-cultural dimensions, that I propose in another paper [12] aim to help designers to sharpen that 'cultural lens'. The socio-cultural dimensions, based on anthropological studies, address those topics in human relationships that typically differ from culture to culture, for example, how people cope with hierarchy, how people cope with individual identity or gender roles. The dimensions steer the designer in a way of looking and questioning that is culture specific. (6) Design students -in the context of the here discussed course- should be discouraged to use the model as a checklist and keep them away from a mathematical use of the model. (7) Finally, the model should be used to discuss the designers' influence on culture and society. The CoC may show them limitations; nevertheless, we could encourage them by showing the opportunities that elicit from a good understanding of culture. A cultural conscious approach in design can be useful for various reasons and that is what we need to show them.

This paper presents one way to do a cultural study in the context of a design project, using the CoC. The model places great emphasize on the influence of processes, such as 'Representation' and 'Production' that apply for late-modern societies. However, these influences are less strong in parts of the world -and for the majority of the world's population- that are less developed. That might explain why designers, doing projects in these contexts, often follow a user centred approach. To what extend the CoC is useful in these contexts should be further studied. For now, it seems appropriate to further improve the application of the CoC in a cultural study in the context of our ACD courses.

## ACKNOWLEDGEMENT

Thanks DCS students and colleagues Timo de Rijk, Erik Jepma, Eva Haagsman and Gert Pasman for your input and involvement. And thanks Armağan Albayrak for the organisation of the ACD course.

## REFERENCES

- [1] Boradkar, P. (2010). *Designing things: A critical introduction to the culture of objects*. Oxford: Berg, p.22.
- [2] Postma, C. E. (2012). *Creating Socionas: Building creative understanding of people's experiences in the early stages of new product development*. Doctoral Thesis, Delft University of Technology, Delft.
- [3] Visser, T. (2012). *Designing awareness systems for social connectedness*. Doctoral Thesis, Delft University of Technology, Delft.
- [4] Tromp, N., Hekkert, P.P.M., Verbeek, P.P. (2011). Design for Socially Responsible Behavior: A classification of influence based on intended user experience. *Design Issues*, 27(3), p. 3-19.
- [5] Lindholm, C., Keinonen, T., Kiljander, H. (2003). *Mobile Usability: How Nokia Changed the Face of the Mobile Phone*. McGraw-Hill Professional.
- [6] du Gay, P., Hall, S., Janes, L., Mackay, H. , Negus, K. (1997). *Doing Cultural Studies: The story of the Sony Walkman*. London: Sage Publications, p.59.
- [7] Johnson, R. (1986). What is Cultural Studies Anyway? *Social Text* (16), 38-80.
- [8] du Gay, P. (1997). *Production of culture/cultures of production*. London: Sage in association with Open University.
- [9] Hall, S. (1997b). Representation, meaning & language. In S. Hall (Ed.), *Representation: Cultural representations and signifying practices* (pp. 15-64). Milton Keynes/London: The Open University & Sage Publications Ltd.
- [10] Mackay, H. (Ed.). (1997). *Consumption and everyday life*. London: Sage Publications in association with the Open University.
- [11] Thompson, K. (Ed.). (1997). *Media and cultural regulation*. London: Sage in association with the Open University.
- [12] Woodward, K. (Ed.). (1997). *Identity & Difference*. London: Sage Publications in Association with The Open University.
- [13] van Boeijen, A.G.C. (2013). *Socio-cultural dimensions to sharpen designer's cultural eyeglasses*. Paper presented at the Engineering and Product Design Education, 5-6 September 2013, Dublin, Ireland.