

EXPLORING THE 'CULTURAL CAPITAL' OF DESIGN EDUCATORS

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ABSTRACT

Design students and practitioners commonly speak of how they have been influenced by their teachers throughout their studies. Sometimes these influences are described as being positive, where a design educator has acted to inspire and motivate students to replicate or enact design tasks, issues and values as their mentor would have. At other times a design educator has left a negative impression, where students find themselves acting against the teacher. This paper is not about students' reaction to educators nor does it look at the relationship between both. It does, however, seek to investigate what is considered to be at the root of design education—the cultural capital of design educators. In doing so, this paper identifies three key themes relating to the cultural capital of eleven design educators from different geographical locations in the western world. These themes result from analyzing intimate narratives presented by the educators, which identify some of the values, beliefs and actions that are consciously and sometimes unconsciously being passed along to future designers.

Keywords: cultural capital, design education, design understanding, experiential learning

1 OBJECTIVES

Design students encounter a wide variety of influences during their education; however, it can be argued that the one factor that has the potential to influence students most is their teachers. Furthermore, it is well known that, within any social situation, leadership is key to how group members interact, participate and perform [1, 2]. More often than not, however, the extent to which this affects the future values, beliefs and actions of these designers-to-be is seriously underestimated. The objective of this paper is to explore the cultural capital [3] of a sample of design educators. The educators reported on here have vastly different backgrounds, teach within different three-dimensional design disciplines (architecture, consumer product, furniture, industrial, jewellery design), and live and teach in different countries (Belgium, Mexico, North America, UK). This study builds upon the authors' work on the culture medium [4, 5] and is connected to a broader research project that looks at the impact of individual cultural capital on design decision-making and design results.

2 BACKGROUND

This paper takes the position that the design educator's notion of design culture is considered to be at the core of how he or she teaches design. This is because design educators have been encultured into practice and teaching in a design studio within a specific design school. Although some authors have depicted studio culture as being generic (*i.e.*, all design cultures are the same or similar), each studio culture is characterized by a completely different set of values, beliefs and actions [6]. Because educators have been encultured into design, it logically follows that they represent a major contributing force towards enculturing new designers-to-be. Research by environmental psychologists has shown how students in architecture, for instance, become assimilated into the social mores of the profession over the five years of their studies [7]. That is, these students gradually take on the language codes, stylistic preferences and rituals of architects, while becoming increasingly remote from the way lay-people describe and prioritise architecture. Like child rearing and involvement in family groupings, educational and other group situations are known to influence personal experience [8], which results in the perpetuation of values, beliefs and actions that are learned in these situations. In the context of this paper the values and beliefs of individual educators are referred to as cultural

capital. The following subsections briefly introduce the notion of cultural capital, followed by some examples of related work accomplished in the areas of design culture, culture and design education.

2.1 Cultural Capital

In his book *Distinctions* Pierre Bourdieu [9] presents and examines the depth of holistic environments by looking at individuals, interactions and sociocultural environments through an integrative theory of capital, field and habitus. Although Bourdieu's work is predominantly concerned with class and inequality [10], to a lesser degree it is also concerned with cultural production. Bourdieu's theme of consumption and status demonstrates how cultural tastes, values and hierarchies are established. Bourdieu expands on the meaning of capital by using the term beyond the typical economic connotation as a metaphor to include a more encompassing list: economic, cultural, educational, social, symbolic and honorific. On a basic level, Bourdieu explains capital as an individual's ability to exercise control over one's own future or that of another. Capital is necessary for people to move up the social ladder therefore it is a form of power. Furthermore, Bourdieu elaborates on two forms of capital, the material and the immaterial. The former is economic; the latter includes cultural, social and/or symbolic capital [11]. For the purpose of this research, these types of capital are presented in more detail, in order to clarify Bourdieu's meaning of cultural capital.

Economic capital is easily understood because it relates to the conventional definition that involves money and marketable commodities [12]. It is well known that economic capital is convertible into money. Social capital, on the other hand, is defined as connectedness related to group membership and involves the interactions and relationships that occur within social groups. In short, social capital is about the quality of relationships between people [13]. Because individuals are known to achieve a great deal more when they are supported socially [14], social capital is considered to have considerable value within society. Ashton [15, 16] has focused on the concept of social capital within the context of design by examining the social capital of design students. Cultural capital, for its part, includes exposure to valued 'knowledge' such as educational experiences resulting in credentials. Cultural capital is acquired by exposure to what is considered to be 'cultural' by a given society or group, such as art, artefacts or music [17]. The link between education and cultural capital obviously derives from students' intensive exposure to knowledge and values in schools, universities and colleges. According to Bourdieu, however, cultural capital is not only acquired in an educational setting, but also the result of living in the world. Cultural capital, therefore, is seen as a resource—a wealth that can be used as power and used to improve social status.

People have less or more amounts of the three aforementioned types of capital, which allows them less or more power in relation to other individuals. Interestingly, according to Bourdieu, cultural capital is considered to be the most influential type of capital.

2.2 Culture and Education

Having introduced Bourdieu's notion of cultural capital, let us now return to the field of design, and zoom in on research related to the study reported in this paper. Over the past decades, the design community has shown a steadily growing interest in cultural issues in design [18]. It is increasingly recognized that designers work within specific contexts and that those contexts are deeply connected to the artefacts they create [19]. Extensive literature reviews revealed that the range of research into cultural issues in design, in general, is relatively limited. The areas explored include collaboration in design (*i.e.*, how do cultural viewpoints affect designers in teamwork), user-centred design (*i.e.*, how are artefacts received by different cultural groups) and the design process (*e.g.*, how does culture affect the design process, what makes up design culture).

One notable book that explores the idea of industrial design practice as a culture of creativity is the *Art of Innovation* by Tom Kelley and Jonathan Littman [20]. It is a first-hand account of some of the techniques used by the design consultancy IDEO for artefact innovation, which promotes risk taking while designing and begins to demystify creative processes in design. In this book, design culture is described as fun and playful, hands-on and intimate (among team members and with stakeholders), collaborative, non-hierarchical and user-centred.

Bryan Byrne and Ed Sands' article entitled '*Designing Collaborative Corporate Cultures*' [21] is an example of research that looks from the *outside into* design culture. The authors discuss design firms being organized and operated as studios that are versatile, fast paced and chaotic. Contrary to Kelley and Littman, Byrne and Sands believe that design studios are hierarchical institutions, which include

status-oriented activities and social cliques. They describe the thoughts on studio culture of one designer, Rob Curedale, who distinguishes between two types of design studios. One is driven by skills acquisition and the other is led by the design hero who inspires creativity [22]. Having established and defined the culture of a design firm, Byrne and Sands provide suggestions on how to create a multidisciplinary and collaborative environment that combines the technical and the intellectual. Because design is based on an apprenticeship-type educational system, they argue, it focuses on skill acquisition and needs to integrate strategic design (*i.e.*, designers working with non-designers).

Two more recent research projects focus directly on culture and design education. The first is Strickfaden's [23] recently completed PhD research that looks into design processes, artefact development and sociocultural processes within design education. This work employs established theories, approaches and methods from the social sciences to explore sociocultural influences on the design process within two design studios, one in the UK and the other in Canada. The second research project is PhD research that explores how design educators become teachers [24]. This interest in culture and education in design marks a shift of attention towards cultural forces that previously were not considered as part of the design process.

Bourdieu's notion of cultural capital and the topics of the research referred to above—design culture, culture and design education—are significant to our discussion about design educators. The way the cultures of design and design education are understood by design educators evidently affects the way they teach. Furthermore, cultural capital is considered to be an individual's accumulation of knowledge through education and life experiences, but also involves the over-riding culture of the field of design. Consequently, cultural capital acts on two levels, the level of the individual (educator, student) and the level of design (design studio, design school, accumulated understanding about design). Therefore, it follows that the approaches and methods used to teach design have been acquired through exposure to the cultural capital of previous design educators. The study reported in this paper acknowledges that teachers instruct students who then become teachers, thus creating a chain of cultural capital that is used in designing and teaching linking each to the next.

3 PROCEDURE AND PARTICIPANTS

Exploring the cultural capital of design educators is a challenging endeavour as it involves gaining personal information about the participants. In this study, the tradition of anthropology is adopted because of its relatively non-invasive, fluid and natural approach. Current methods and approaches in anthropology attempt to study the relationship between individuals and cultural processes as holistically as possible [25, 26] while recognising that absolute holism is not possible [27, 28]. Often multiple methods are employed in order to apply several lenses to an investigation and to cross-reference what may be occurring. Observational ethnography is at the core of discovering cultural nuances and, in this study, is combined with interviewing. General interview topics for the participants provide focused discussion points to proceed from. This approach differs from more controlled approaches (*e.g.*, protocol analysis) in that it is accepted that the data obtained are largely driven by negotiation between the researcher and the participants. Such an approach is invaluable when engaging in an investigation that explores more abstract research questions.

Eleven design educators have participated in this study. They are chosen for the design disciplines they teach in, their differing locales and their willingness to participate in the study. Except for one, all participants are male. They are between the ages of 33 and 65 years and have 2 to 30 years of teaching experience. The participants are rated as novice, intermediate or seasoned educators. Novice educators have less than 5 teaching years, intermediate educators have between 6 and 15 teaching years and seasoned educators have 20+ teaching years. Two educators are defined as novice being relatively new teachers with just 2 and 3 years of teaching experience respectively. Nevertheless, they are rated as intermediate/expert design practitioners as they each have more than a decade of experience in their fields. There are six intermediate and three seasoned educators. Interestingly, on average, the intermediate educators had fewer years of experience in design practice than their novice counterparts. Our seasoned educators had 25+ teaching years with 20+ years of experience in design practice. Table 1 gives an overview of the interviewees and their backgrounds.

Participants	Country of Origin	Years of Teaching	Subjects taught	Years in Practice	Highest level of education
1	Canada	2	industrial design	15+	MDes
2	Canada	3+	industrial design	10+	MDes
3	Belgium	5	architecture	10	MA
4	Scotland	6	industrial design	0	unknown
5	England	7	consumer product	7	MA
6	Mexico	8	furniture design	15+	BA
7	Belgium	10	architecture, jewellery	15	MA
8	England	12	consumer product	12+	MA
9	Norway	25+	industrial design	30+	MA
10	USA	30+	furniture design	20+	MA, MA (RCA)
11	Belgium	30+	architecture	30+	MSc

Table 1: Overview of the eleven design educators

Of the eleven design educators three live and teach in Belgium, one in Mexico, three in North America (Canada, USA) and four in the UK (England, Scotland). At the time of our study, four of the participants were teaching at the design school where they were educated, two live and teach outside their countries of origin. Most design educators are teaching at different design schools from one another with no known affiliations to other interviewees. The participants teach within a range of design programmes focusing on three-dimensional design practice including architecture, consumer product, furniture, industrial and jewellery design.

All design educators were interviewed independently in order to better understand how their individual perceptions are manifested in the teaching environment. In addition to this, the majority of the participants were observed while teaching *in situ* over an extended period of time. When educators could not be observed, they were provided with a questionnaire to compliment the interview. The discussion and conclusions presented in this paper are predominantly based on the interviews and are sometimes informed by observation and questionnaires. The participants are each interviewed with a number of open-ended questions about their backgrounds, interests and significant influences. Typically the duration of each interview is between one and two hours. This varies because of the nature of enquiry and the detail of individual responses. The interviews were tape-recorded and notes were made. Afterwards, we transcribed the tapes and identified common themes across the transcripts. The procedures used for this study encourage the eleven participants to share their understanding of design and design teaching with the researchers. Through these interviews the educators reveal their educational background, design practice experience, significant influences including individuals or other resources, and their basic beliefs about teaching design. The resulting data are rich narratives about designing and design teaching that reflect the personal values, beliefs and actions of the eleven participants, yet are easily relatable to design processes and design education in general.

4 RESULTS

Although teaching was not the primary topic of discussion in the interviews, it is clear that our educators identify themselves as being teachers of design. Some of the interviewees seemed to feel that their teaching came second to their design practice, while it was vice versa for others. Either way, there are a number of instances when the participants critically reflected on their personal teaching approaches and styles. For example, a seasoned educator (UK) who teaches industrial design says,

The thing about teaching is you're learning as you go along. First time around it's an experiment to see how you respond. Second time around is you put in your changes to the first and see if the different group responds in the same way. Third

*time you enhance that and see what the three years have improved. Fourth year it's starting to get a bit boring and ... change!*¹

Even though the majority of the design educators in this study have not been formally taught to teach, it is clear that they take the teaching process serious and wish to impart as much design knowledge as possible while engaging with their students.

The primary role of a design educator is to instruct students in a variety of topics that include communicating an idea through various media, asking clear questions about the design project, conceiving reasonable functional specifications (material, manufacture, user-interface) and exploring tactile and visual considerations regarding form and assembly. Teaching this variety of physical and conceptual skills requires careful consideration and an ability to connect the dots for students. Experienced students already have some design background and are therefore presumably easier to instruct than novice students [29]. The participants interviewed for this study made no distinction regarding techniques used at different levels of teaching.² However, each educator provides in-depth narratives using examples from their personal lives to illustrate principles they valued as being important to pass on to their students. These data enabled us to identify themes that characterise the cultural capital of different educators. These can be sometimes attributed to a generic understanding of design practice and design education, whereas others are more relative to individual personalities, experiences and interests. Three key themes are identified and analysed in order to better understand their effects on designing and design teaching. Each theme is presented in this section with supporting participant excerpts from the interviews.

4.1 Teaching design through outside media

The first key theme relates to how the design educators make sense of design for their students by teaching with materials from outside design. This material is closely related to the educators' personal lives and experiences, which interestingly is articulated directly by some of the participants. For example, a novice educator (Canadian) who teaches industrial design referred to his grandmother when clarifying his perspective on using popular media for design inspiration, and on encouraging students to read and look at science fiction in particular. He recounts,

My grandmother, who was an austere Italian woman, would never watch soap operas because it is a lie. People pretending to do things that they do not do. "One day I will have a big house and big family", but it's a lie. People don't lead those lives. It is fake. It is a lie. And it is apparent to everybody. But she would watch Star Trek. We know there are no Kling-ons. It doesn't pretend to be something that it is not. There is an inspiration in that it leaves you open to ideas. It could be this or that.

According to this interviewee, designers can find ideas from things that are not grounded in reality or known as part of their belief systems. He also indicates that all science fiction may not have something useful, yet, unlike more mainstream forms of literature and entertainment, science fiction is invention for invention sake and as such provides ideas of what something could be. He compares the popular North American television series 'Everyone Loves Raymond' with science fiction and says that the latter has much more to offer in terms of inspiration.

Interestingly, a somewhat more experienced design educator (UK) who teaches consumer product design adopts a similar approach in that he encourages students to make connections between dissimilar media and materials. He suggests that forging connections between films, books or any other form of popular culture aids in designing products. He consciously uses this strategy in his own design thinking, and stimulates his students to do so too.

A third interviewee (Belgium), who teaches in both architecture and jewellery design, goes one step further. He wishes to teach students to control and direct their inspiration, instead of passively waiting until they are struck by a bright idea. His strategy is to encourage students to create a memory book containing information that reflects their personal interests, likes and dislikes. In this book, students continually collect collages, images and preferences, to serve as base material during concept generation.

¹ Quotes that are indented and italicized are taken from the transcripts resulting from interviews with the participants. These transcripts are unpublished.

² Several interviewees did refer to differences between novice and more experienced students, yet none of them explained how that influenced their way of teaching.

In the design educator's words,

What we try with that memory book is to say: 'Look, what do you like to watch? What do you listen to? What do you like to eat? What do you like to do?' [...] And not: 'Yes, I love Bach. And I like Tadao Ando. Etc. Etc. And I only watch movies by Peter Greenaway.' No, no! 'I've only watched Friends and I've also read Willy and Wanda, and I also played with Barbie.' [...] Don't throw these things away. [...] that's your culture, that's your basis, and if you look at other people, and you're projecting yourself onto those other people, then you're hiding or suppressing part of yourself.

What these three design educators seem to have in common is that, in trying to make sense of design to their students, they call in material from outside design, relative to their personal lives and experiences—in other words, they call in material from their cultural capital. A first role of cultural capital in design education thus seems to be that of a mediator in design conversations between educators and students. By referring to elements from their cultural capital, the educators make their understanding and views of design explicit.

4.2 Interactions within different learning environments

The second key theme deals with how the participant educators related to the learning environments they had experienced in their own lives. It can be expected that to some degree individuals replicate situations they have encountered and understand. In the case of design education, it is clear that a great deal of cultural capital comes from what current design educators experienced as students. On the most part the design educators interviewed draw upon experiences they had as students within the design learning environment. For example, a novice educator (Canada) who teaches industrial design has an undergraduate background in architecture. He uses the understanding of figure-ground relationships acquired in architecture school and has modified this to fit with the design of industrially produced products. In the following transcript excerpt he mixes his current teaching with his past learning experience. He explains,

I always talk about the figure-ground relationship first year in architecture (his past student experience) ... and we had this guy named [Name] who gave basic theory lectures. [...] They talk a lot about formal dominance. When you look at a design. You see a figure-ground relationship between the button and slot it's in the slot and the body of the camera. It's always understanding layers and how you see the frame. Your vision on that and how you expand out your vision and that allows you to see different figure-ground relationships. And also the way your eye wanders it bounces all over the place and never focuses on one thing.

Another interviewee (Belgium) has both studied and taught architecture, yet currently teaches jewellery design. However, he finds teaching jewellery design students much more difficult than architecture students. As a design educator, he likes to employ precedents as an alphabet or dictionary, a frame of reference for his students. Being educated as an architect, he is far more fluent in the architectural alphabet than in that of jewellery design. His frustration about being unable to properly employ this process at all times is demonstrated when he says,

To architecture students you can say: 'Look at Frank Lloyd Wright, or look at Mies van der Rohe, or look at...' and you can in fact project a complete conceptual framework at once to the other... and hope that he has understood it. It's relative, but in principle, you can make an example of something that is considered to be known.

A completely different relationship to personal learning experiences is reported by an intermediate educator (UK) who teaches consumer product design. He uses some experiences from his master's education to examine why he enjoys teaching and, doing so, reveals an approach he uses with students. He really enjoys teaching, he contends, because it provides him with a playground, a space to play and produce critical designs that operate outside traditional boundaries of professional practice. He is mainly interested in producing physical manifestos as a result of critical theory, so for him teaching is not about replicating, but about encouraging, cajoling and enabling. Therefore, this design educator is more interested in seeing exploration, creativity and spirit in his students than in enabling practical procedures and processes to create successful designs.

As noted above, learning environments do not stop at the walls of the design school. In addition to those elements that clearly derive from design education, the interviews refer to other learning experiences participants had. For example, an intermediate educator (Canada) says,

Coaching experience. That had a big, big ... I teach design like coaching ... it's like standing on a pool deck. The biggest influence has come from diving coaches I worked with.

Having been a professional diver and diving coach for a number of years, this participant spoke of how he transferred some of the knowledge gained in these experiences to teaching design.

Finally, one of the educators interviewed had no experience in practice and had not completed any postgraduate studies. This intermediate educator (UK) spoke frequently about how his students lacked hands-on experience, something he had acquired as a technician for a number of years prior to beginning teaching. He says,

I feel designers should be able to drill a hole and screw the screws. Those who fiddle with motorbikes or fix their own cars or fit a kitchen over the weekend have a much more fundamental understanding of how things go together. The workshop is an equally valuable resource as a library. That experience of how [a shop technician] works and how things go together is very important.

Judging from the interviews and the examples shown here, design educators rely on their personal learning experiences in many different ways. As illustrated, these learning experiences are not limited to their experiences within design education, but also relate to other contexts. Therefore, a second role of cultural capital in design education is to map learning experiences to teaching experiences. This is accomplished directly (design to design) or indirectly (e.g., coaching to design).

4.3 Interactions with past teachers

Among the various aspects of learning environments mentioned in the interviews, one was brought up so frequently, that it seemed to deserve a separate theme: the interactions with past teachers. Indeed, the majority of the educators interviewed referred to teachers they experienced as being major influences in their lives (and sometimes in teaching and design). In this study, more than two-dozen former teachers, technicians, tutors and instructors from a variety of levels and fields of expertise were discussed by the interviewees. In just over half of the narrations, the teachers discussed had left a positive impact on their former student. For example, one of the intermediate educators (Mexico) who teaches furniture design discusses how he models his own teaching on several of his former teachers. He states that,

Design seemed so natural. But teaching ... when I started teaching I started looking at why or how I should teach. What is the whole idea of teaching. I thought back on different people I had as teachers. In university I had a couple of good teachers but when I was in high school I had a really amazing art teacher. He basically taught me, another, who are interested in art. He couldn't care less for the other students because they didn't have interest. The other one was a professor at university and was a photography professor. He was passionate about what he did.

The major thing this participant felt to have learned from his photography professor was not about using the camera, but about relating to what he was doing. His connection to this teacher was about “passion” rather than about knowledge—about understanding rather than about the subject. In the same way, this interviewee wishes to show concern for his students and wants to support what they think.

This feeling of passion in a past teacher is echoed in a statement from a novice educator (Canada) who teaches industrial design, who depicts one of his instructors as follows:

[Name]. He was. It wasn't any one thing he said just his attitude towards things. He teaches graphic design. He doesn't see it ... it was design ... it didn't matter what it was. He didn't think of it in terms. Whatever the issue was 2D or 3D it was just a problem to be solved. [He had] an outward honesty about things.

An intermediate educator (UK) who teaches consumer product design reminisced about earlier experiences with his teacher from a master's programme he was applying to. This participant seemed struck by the overt, eccentric personality of his teacher, which he wanted to emulate in his own teacher-student relationships. He describes his first meeting with the design teacher,

I went to the interview wearing something smart and I was met by someone wearing a three-piece “suite”. It can't be described as a suit because it was complete with all

the bits and bobs. [Name]. I went to his office, which was wilfully post-modern except the brass on the door. And I basically had a philosophical discussion for four hours about design and he offered me a place.

The interviewee seemed especially impressed by the character traits of his former design teacher, which he described as “absolutely mad” and “wilfully eccentric”. Interestingly these attributes were considered by our participant as significant to his decision to enter into further studies in design, but are also influential in how he likes to portray himself as designer and design educator.

Besides discussing former design teachers, two participants openly spoke about how they had been influenced by workshop technicians. In both cases the interviewees experienced their interactions with technicians of considerable value within their own learning environments. They also indicated that they explicitly point out to their students what an invaluable resource technicians represent. For example, one of the novice educators (Canada) who teaches industrial design says,

I learned a lot from shop tech's like [Name]. The guys here aren't bad. I tell students make friends with them. They were good when I was going through. If you are willing to listen to them there is a lot you can learn. Take their advice, do as they suggest because they know better than you do. How to use machinery. How to make things. A lot of influences from — or a lot of good advice from shop techs.

As previously noted, the interviewees polarized their former teachers as positive or negative. The positive are those teachers who inspire and motivate, while the negative are former teachers who taught our participants ‘how they should not design/teach/interact’. An intermediate educator (UK) teaching consumer product design recalls,

Our tutors were stuck in post-war Britain. They were against certain kinds of design. Memphis had happened but there was stiff resistance against it. One student brought in a shopping trolley and got yelled at.

A novice educator (Canada) still seemed to hold resentment towards one former teacher in particular. In his memory, this teacher did not want to teach and had a negative attitude. The teacher did not get a job, the interviewee contends, and would overtly express that he felt the students would not get one either. By contrast, the interviewee indicated that he likes to be an example for his students—he has a job in industrial design practice where *he gets to do what students aspire to do*.

Interestingly, one of the seasoned educators (UK) who teaches industrial and consumer product design also discusses a former educator who he disliked, but in a slightly different light than the other participants. He says,

When I was in pre-diploma (foundation year) there was one tutor who I hated. He stood for everything I hated. It was good. It gave me something to get my teeth into. Too often people just drift into things but this forced me to be conscious and choose what I would do. He was egocentric. Everything I think people should not over-emphasize. [Laughing].

These examples first and foremost underscore the importance of design educators as major influential factor in design education, which motivated this study in the first place. At the same time, however, they illustrate the different directions this influence may take: some interviewees seem to consider a particular teacher as a model which they try to emulate in their own teaching; others as the very opposite of what they themselves stand for. In both cases, these past teachers act as a point of reference for the interviewees to consciously position themselves as designers and/or design educators, the final role of cultural capital uncovered in this paper.

5 DISCUSSION AND FUTURE WORK

In order to explore the cultural capital of design educators—and its possible role in design education—we conducted a series of in-depth interviews and, when possible, observed eleven educators involved in teaching design in the western world. Although the interviewees represent different generations, disciplines and views of design, we were able to identify three key themes in their responses to queries about designing, design and design education. These themes result from making connections between the discussions of multiple interviewees.

The first theme is brought up by several interviewees who explicitly indicate that, in teaching design, they use materials commonly considered to be from outside the design discipline, for example, film, television and/or common objects from popular culture such as children’s books and toys. These materials are often distilled from the educators’ personal lives and experiences, and reflect their

engagement with the media-dominated environment of the western world. The second theme is revealed by the frequent discussions about different learning environments, ranging from experiences in undergraduate and postgraduate design studies, earlier school years, recreational educational experiences and one instance of a design firm. Zooming in on one aspect of these environments, the third theme relates to the impact of the interviewees' teachers in their own educational experiences. Multiple interviewees seemed to remember one or more former teacher as being particularly influential in shaping their view of design and/or design teaching. As to the nature of this influence, however, opinions were more divided. In fact, the participants polarized their feelings about former teachers by associating them with either having a very positive or an extremely negative impact. Thus far, the themes suggest that design educators are predominantly influenced by popular culture and media, their educational experiences in and outside design, and in particular their interactions with former teachers. Even so, some of our interviewees indicate connections with things outside of design that can be paralleled with their current teaching requirements. Along with the three key themes, however, other patterns emerged during these interviews as characteristic of how cultural capital may be influencing teaching and how this influence is regarded among design educators. One noteworthy pattern involves the vast differences between how design educators perceive design and designing. This particular pattern may provide us with a better understanding of the current state of the culture of design education; however, future research is required to analyse this pattern in-depth.

At this point in our exploration, perhaps the best way to characterize the role of cultural capital in design education is by comparing it to that of a 'culture medium', in the sense of a seed-bed for growing micro-organisms. It embraces various substances, phenomena and traces—both from within and from outside design—all of which may function as raw materials for the cultural capital of future designers and design teachers. From time to time, the relationship with this seedbed is being denied—the explicit dislike of a former teacher is a case in point—yet in some sense even such a denial may be considered a sort of relation.

Varied as our interviewees might be, it is obvious that they cover by no means the full range of approaches to design teaching. Moreover, we are also inundated with further questions about *how* designers-to-be and design-educators-to-be are encultured into design practice and teaching, and whether the cultural capital of individual design educators is identifiable as being particular to design. Future work will therefore continue to explore the cultural capital of these and other design educators by analysing in-depth some of the features that emerged during the interviews. Subsequently, we will zoom in on specialized areas of design, such as design for sustainability or design for all, to investigate how the cultural capital of designers and/or design educators relates to their design processes and artefacts.

Awaiting the results of this future work, recognizing *that* design students acquire their personal cultural 'design' capital through their teachers is already an important step toward a broader understanding of how design educators and the educational environment help to form future designers. In having a more holistic understanding of cultural issues, the implications of this work may act to inform design curriculum development and the culture and sociology of design educational scenarios in the future.

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