INTERNATIONAL CONFERENCE ON ENGINEERING AND PRODUCT DESIGN EDUCATION
8–9 SEPTEMBER 2022, LONDON SOUTH BANK UNIVERSITY, LONDON, UK

REFLECTIONS ON ADDRESSING TABOO, SHAME AND SOCIAL STIGMA IN DESIGN PROJECTS

Casper BOKS and June Kyong TRONDSEN
Department of Design, NTNU Norwegian University of Science and Technology

ABSTRACT
Social phenomena which are taboo-prone and in which self-conscious emotions such as shame play a role, appear to be increasingly of interest for students, and it is believed that design can play an important role in developing interventions which can contribute to more social, healthy and sustainable behaviour. Based on recent experiences with supervising master's projects where connotations of shame play an important role, this article summarizes key insights related to choosing topics, choosing and triangulating methods, conducting supervision meetings, as well as general reflections on the role of the (student) designer in such projects.

Keywords: Design, design education, shame

1 INTRODUCTION
The scope of design is continuously evolving. Throughout the past decades focus on producing artifacts for the industry has moved into embracing the non-physical sphere of services, digital interfaces, experiences, as well as public services and systems. The issues designers engage with are growing in complexity and impact; these days phenomena such as lifestyles, politics, norms and values have made it into the design agenda [1, 2]. Along with the expanding scope of design, there is an emerging demand for design education to keep up with this development and better prepare students for the tasks ahead. It is increasingly common that design students take on topics where socio-cultural aspects play a dominant role in the challenges at hand, often beyond what is common in more traditional industrial design projects, and therefore often beyond what both students and their supervisors are accustomed to. Such projects include topics which require students to get a grasp of how social phenomena are intertwined with taboo and shame, and how negatively-valanced self-conscious emotions such as shame play a role in what people think, do, see, hear and feel (but also what they do not (want to) think, do, see, hear and feel) – and it is precisely this second aspect of understanding users which we would like to address in this paper. Examples of such contexts include:

- In a health context: Disability stigma, loneliness, mental illnesses such as anxiety, depression and eating disorders, sexual shame, body and health image, addiction of all kinds, violence, etc.
- In a social context: Gender roles, fake news, social pressure, online shaming, call-out-culture, racism, political preferences, subcultures, unconventional lifestyles, crime, poverty and wealth, etc.
- In an environmental context: Food waste, flight shame, plastic pollution, overconsumption, blame for climate crisis, hedonic shopping and compulsive buying, meat shame, etc.

Such topics not only share a high level of complexity which is strongly affected by norms, culture and politics, but they also challenge students in their ability to deal with the more sensitive sides of society. Whilst design education has equipped students with the tools that enable them to raise good questions, design with empathy, access tacit knowledge, this toolbox becomes less straightforward when dealing with awkwardness, embarrassing questions and dark spots. The issue of equipping students (and supervisors) with appropriate tools for research and reflection has become even more timely since our department has been actively recruiting master's students to write their final master's thesis on shame related topics, in connection to an ongoing PhD project focusing on the role of shame and taboo in design [3]. Thus, this paper is based on our experiences with supervision of these students, and aims to address how design students, together with their supervisors, can be prepared to design for social contexts influenced by stigma, taboo, and moral (or self-conscious) emotions such as shame, embarrassment and guilt.

The paper is structured as follows: section 2 provides a brief overview of the sparsely relevant literature. Next, chapter 3 provides a description of the student projects which form the basis for mapping our experiences and continues with key insights for both students and supervisors derived from them. Chapter 4 concludes the paper.

2 LITERATURE REVIEW

Although not in abundance, literature provides some examples of design projects which have explicitly addressed taboo and shame. One recurrent topic is that of female intimate care; various papers present design-led approaches to engage participants in addressing menstrual taboos or female pelvic fitness [4-7]. Other taboos concerning embarrassment and bodily fluids have also been investigated. Wilde [8] presents a case study in which autoethnographic inquiry (including documenting food and excrements over a longer periods of time) was used to engage participants in workshops dealing with serious gut disease, as well as their family members. The aim was to spur a genuine interest in otherwise taboo-ridden social discourse on 'shit' and the food system, develop new imaginaries, and thereby new practices or positions. This estrangement process provided a more nuanced sense of the participants' willingness to transgress taboo (phrased as 'hang their taboo on the wall for a while'), address vulnerability, and eventually develop alternative relationships with their gut microbiome. Helms [9] also explores bodily excretion and its relevance to our everyday function and well-being, focusing on how interaction design can support to leverage intimate and somatic data to manage urination. Papers like these do reflect on design-led tools and approaches to address taboo-prone topics in transformative and empathic ways. They do however rarely so from a design education perspective, and thereby do not focus on the implications for students and their supervisors when choosing and conducting projects with address such issues. It is in particular this perspective which this paper aims to address.

3 EXPERIMENTING IN MASTER'S LEVEL STUDENT PROJECTS

Both in 2020 and 2021, we were fortunate to be able to recruit in total eight master's students in design who were interested in exploring taboo-related topics where feelings of shame and failure in meeting social expectations would 'obviously' play an important role. Below, a short description of the six projects (some students worked in pairs) is provided as it sets the scene for the rest of this paper.

- Design for sexual wellbeing [10]. After a general mapping of various topics related to sexual wellbeing for different age groups and sexual orientations, this project focused on embarrassment related to expressing the desire for and the usage of personal lubricants, in a romantic setting.
- Safe personal sexual exploration for young male adults [11]. This project explores attitudes concerning male sexuality, questioning the lack of openness and sex-positivity, and highlighting the semantic differences in how openly we talk about and how we talk about male versus female sexuality, attempting to reduce sexual taboos and communicate sex positivity amongst young males.
- "Sending nudes" culture in secondary and high schools [12]. As a response to the increase in victims of nude image sharing online, this project investigates how an educational board game can create a safe arena for teenagers to learn about, discuss and reflect such a sensitive issue.
- Rethinking gender roles in design education [13]. As a critique to the binary gender system and conventional gender roles, and the physical surroundings that explicitly (and implicitly) support this worldview, this project focused on developing workshops and guidelines to make designers aware of explicit (and implicit) gender biases and support designers to design for a more gender fluid society. The results of this project have partly been documented in a conference paper [14].
- Design in the context of economic shame. This project has a focus on anticipated shame and awkwardness connected to several common situations like applying for unemployment benefits and taking up additional loans.
- Rethinking (voluntary) childlessness and the nuclear family. This project explores perceptions on awkwardness related to the need to justify such life choices (in- and outside relationships), in relation to societal perceptions on the female social role and the nuclear family.
- Design for male mental and physical health and wellbeing. As it is not uncommon for men to be reluctant and feel embarrassed to discuss mental and physical health issues with family, friends and even doctors, this project investigates the shame connected to this social phenomenon, with special emphasis on young men.

3.1 Method

Our empirical data for extracting the key insights presented in the next subsection is about 150 hours of supervising the above projects: on average three hours per month (2-3 meetings), for five months (in four of the seven projects for nine months as the projects included both a pre-master's thesis (22,5 ECTS) and master's thesis (30 ECTS). In the majority of supervision meetings, both authors were present, notes were taken and frequently discussed, both between the supervisors and with the students. The relevant literature which is partly presented in section 2 has provided us with some reference material to compare our own experiences with, but the main reference material is comparison with 20 years of experience with supervising a wide range of 'regular' design master's projects. Additionally, the first full draft version of this paper was shared with all involved students, with an invitation to comment and add to it, which provided input which helped to further nuance the paper.

3.2 Key insights

Based on the content of the projects described above, and our experiences with supervising them, we distinguish between the following project phases to present our insights. When guiding students in choosing their topic, during supervision meetings once the project is in progress, related to the choice of methods during the project, and after the project is concluded.

3.2.1 When guiding students in choosing their topic

Although the student projects were spurred on by a project proposal focusing on the intersection between design and shame, few of the students started off their projects with a single clear direction. Instead, the first stage of the project would concentrate on discussing multiple, and sometimes very different directions for the project, in terms of type of shame or type of design intervention. Some students were more eager to design solutions to improve a current situation, some were more interested in a norm critical approach, while others again wanted to focus on improving the designer's own toolkit. Independent of these differences in topic, user groups and medium, what distinguishes these "shame projects" from more "traditional" design projects - which are often initiated by a given problem and/or defined by a company or organization - is that they were personally motivated, with challenges identified by the students themselves. This could be thoughts about (or frustration with) unfairness or injustice related to observations of everyday phenomena they found hard to make sense of topics they found intriguing (or irritating), social areas they did not have the chance to engage with due to taboo, and gaps in their own toolkit to handle topics of a sensitive nature and/or form a norm-critical perspective.

3.2.2 During supervision meetings once the project is in progress

Supervision meetings tend to include discussions on the topic in a very broad sense. As opposed to more conventional industrial design projects such as appliance design, themes addressed in the aforementioned projects are complex and not well-articulated in scientific or popular media. Finding the relationship between shame and the topic at hand requires broad exploration of historical contingency, social and cultural context. We found that such an initial broad divergence in the topic at the outset of the project was both inspiring and mind opening, but also overwhelming for some students. As supervisors it is important to balance a holistic and broad understanding on one side, and keep projects mentally manageable for students, as well as feasible to complete in one semester. This is not easy, as a practical consequence of this tendency (or need) to diverge is that it motivates students and supervisors to brainstorm about various relevant perspectives and, experiences, almost without a filter; each new thought may be novel, valuable, and worth articulating. Similar to an abductive approach, it is not upfront clear which directions in a conversation may be worthwhile to pursue or lead to interesting conclusions; each digression is potentially interesting. Examples of such conversational digressions are questions like 'are there boundaries to how much shame one can have,' 'would it be scientifically and ethically correct to interview people who had a few drinks to make it easier to talk', 'is removal of shame inherently the same as steering away from it'. We found that it is essential to distinguish between discussing taboo-prone topics, where taboo and shame is inherently connected to the topic (like sexuality or racial discrimination), and topics where taboo and shame play important roles, but without it being taboo or shameful to discuss the topic itself (like addictions or mental health). In the first case, there is a much greater need to establish a sense of trust, to find a common language and level of openness that feels comfortable for both student and supervisor. Only then is it possible to address shame as a design factor in the same way as we are used to talk about 'experience,' 'quality' or 'user-friendliness,' to name

a few topics that are part of most student design projects. We also observed that our students tend to mature into their own project specific technical language and become able to articulate sensitive parts of their topic in a clear and direct manner, with a choice of wording that sets judgement aside and comes across as neutral and non-offensive to bystanders.

3.2.3 Related to the choice of methods during the project

As indicated above, uncovering and articulating the complexity of social phenomena in the aforementioned projects takes more time than when choosing a conventional topic. Not only during supervision meetings but also in the factual design process, we see value of encouraging students to use more than average time in framing their research topic, rather than blindly starting with context mapping as they are perhaps used to. As expected, we found that in these 'shame projects,' traditional methods of inquiry such as surveys, interviews and focus groups were not necessarily suited for context mapping and for uncovering user needs, wants and perspectives – although these methods were used as well. In addition, we have experimented with, and adapted, a number of tools and methods that were thought to be especially suitable to gain user insights about these taboo-prone topics where shame, embarrassment, awkwardness, peer pressure, stigma and other nuances of shame obviously would play, and indeed played a role. This in an attempt to uncover hidden, personal feelings which would not be shared through traditional methods of inquiry. The methods we used included a graffiti wall, cultural probes including scenario booklets, context safari, bridging concepts, association games and empathy cards. In the second cohort we worked with, students also used early prototypes of tools which we had developed for the specific purpose of designing in shame and taboo-related contexts, including a 'shame-stretching' tool, a meme tool, and an inspiration card deck tool. They expressed that it was exciting and inspirational to use unfamiliar tools and to contribute to develop them.

All research projects, including student projects, need to follow ethical guidelines and data protection regulations. The Norwegian Centre for Research Data, where all student projects need to be reported to, and which verifies that guidelines and regulations are followed, has good procedures for this, and even provides recommendations for how to conduct research which reduces the risk of privacy issues. We find it essential to strictly follow these requirements and seek support from NSD, as well as relevant research ethics committees, given the cautious nature of topics in the projects reviewed.

3.2.4 Related to the use of methods during the project

We encouraged students to depend heavily on literature and experts from disciplines that address relevant social phenomena and shame in particular. But in addition, although using internet as a source of information is often seen as non-scientific and sometimes even discouraged as a source of reliable information for students, we chose to stimulate the use of internet and other popular media in addition to scientific and expert sources, to research how shame and related concepts manifest themselves in popular culture and public discourse. Sources like urbandictionary.com, imgur.com, reddit, blogs, discussion forums and social media posts have proven to be invaluable to capture such manifestations. In particular user generated content such as humorous memes have proven to be extremely useful to capture the essence and nuance of certain complicated social phenomena.

Interview situations

Even though the students were creative in using a variety of designerly methods of inquiry, all of them partly relied on interviews, focus groups and workshops which were dependent on direct contact with respondents. Based on the student's experience, we like to share the following insights:

- Selecting close friends or classmates as participants for interviews and focus groups is usually, for obvious reasons, not encouraged in design projects. However, we have encouraged recruiting this way for the purpose of obtaining general insight in phenomena such as gender, money, sexuality, family structure – which people can most relate to, but which may be easier to discuss in the presence of familiar participants. That said, some student groups also experienced that it is possible to create an atmosphere where even participants who did not know each other before, were comfortable enough to share very personal thoughts and experiences.
- Motivating participants (by humour, social interaction, creativity) to disclose information people might find embarrassing and uncomfortable to share – while still respecting their boundaries.
- Probing to uncover hidden knowledge that many people are unaware of/ things we take for granted – make something implicit and underarticulated more visible and explicit.
- Use language used by respondents themselves (for example 'horny' instead of 'sexually aroused').

- Account for a greater need for anonymity and a safe environment when disclosing information on a sensitive topic. It is important to refrain from sound and video recording when interviewing respondents (unless interviewing experts).
- Though partly obvious, we felt that it was necessary to point out to the students to make sure that their interview behaviour should be free from sharing personal experiences related to the topic, and to take a generally judgement free role as investigator by avoiding sharing opinions which interview subjects could consider as judging or opinionated.
- We became aware that respondents may be or become affected by questions asked during an interview, and that it was therefore important refrain from an inquisitive tone which may make the respondent uncomfortable or even shut down completely. This requires an attentive interviewer who is able to read the respondents' reactions and mediate in a way that limits discomfort.

Method triangulation

Based on experiences with the projects, we found that it is important to:

- triangulate with methods where respondents are guaranteed absolute anonymity, including from the researcher, by allowing for participation without anyone noticing (graffiti wall, or anonymous scenario booklets to be put in locked boxes).
- triangulate with methods which focus on gathering opinions about a theme, rather than digging into respondents' personal experience, and triangulate with methods which allow respondents to reflect on others' behaviour instead of only reflecting on their own.
- triangulate with methods which map culture around a phenomenon, opinions about the phenomenon, and own experiences with the phenomenon.
- avoid obsequious following of established design methodology.
- allow for contextual reinterpretation of terms like 'tacit knowledge,' by understanding that knowledge could be tacit because of shame related issues instead of just unprobed.

3.2.5 Reflection on the student designer's own role

It is important to continuously question one's own role when investigating the phenomenon at hand, questioning one's objectivity, even accepting one's subjectivity – and adapting methods of inquiry accordingly. For example, design students who are avid surfers or bikers would be well accepted as highly suitable for designing innovative concepts for surf boards or bicycle accessories. But students who choose 'shame projects' because of own experiences, should evaluate the suitability of the topic for them, for example by assessing how they may become emotionally affected by it. In none of the projects supervised autoethnography was explicitly used as a method, but students expressed that it cannot be excluded that personal experiences played a role – for better or for worse: it may have enabled a more tangible impression of the phenomenon, but personal experience with the topic or specific feeling may also have coloured collection and analysis of data. Other potentially challenging situations which may occur, and students should be (made) aware of include:

- handling views from respondents about shameful topics which contradict with the student's personal values or moral.
- handling opinions from family, friends and peers who question the suitability or appropriateness of the topic, either in general or for that specific student. Others, influenced by their own norms and values, may say that the chosen topic is not really worth investigating, or that other problems are more important to address. Similarly, handling views that it is not the designer's business to address the problem and that it instead should be taken care of by, for example, psychologists.
- Handling the uncertainty during the project whether the topic will actually lead to a result which is perceived to show the student's ability as designer, both by friends, peers, and, not unimportantly, external examinators of the project.

Such reflections about the suitability of the student-topic match should – in addition to close friends – obviously be done in dialogue with their envisaged supervisor(s), who should themselves evaluate whether they are suitable for supervising the topic, as it may involve emotional moments which may be uncomfortable to handle. We are currently not aware of tools which facilitate such reflections, neither for the student nor the supervisor, at least not in a design education context. When pursuing more of such student projects to inform our research, it will be necessary to learn from for example study programmes in psychology and art, where it is said that many students choose master's thesis topics related to personal experiences. Another valuable recurring discussion theme in supervision meetings was acceptance that the implicit designerly role of moralising actor as well as 'problem solver' may be

inappropriate. It is important that students understand the difference, and differentiate between ethics and own personal moral, and acknowledge that while they might communicate certain moral values through their project, taking the observer and/or mediator role may be more appropriate in some cases.

4 CONCLUSIONS

As similar papers do not seem to exist, we found it valuable to share our experiences with working with master's students on shame and taboo-prone topics. This paper summarizes our learnings so far and lists insights related to selecting topics, choosing and triangulating methods, conducting supervision meetings, as well general reflections on the role of the (student) designer in such projects. The general feedback we have gotten from students is very positive, and they appreciate the encouragement and opportunity to take up these topics. Colleagues within and outside our department have expressed similar support, though sometimes combined with surprise, caution or even concerns about pitfalls such taboo-prone topics may impose. This helps us to continuously reflect upon these concerns and thereby better support our students to take on unconventional projects, explore unknown territories and discover untapped potentials – and thereby helping them to achieve their goals. Finally, we would like to acknowledge and thank the students from the NTNU's Department of Design who chose to do their master's projects on the topic of design and shame, and thereby contributed with input for this paper.

REFERENCES

[1] Malpass M. (2019). *Critical design in context: History, theory, and practice*. Bloomsbury Publ.

[2] Margolin V. (2015). Social design: From utopia to the good society. In: Resnick, E.: *The Social Design Reader*, Chapter 3. Bloomsbury Publishing.

[3] Trondsen J. and Boks C. (2022). Design and Shame. In Proceedings of the Design Society: DESIGN Conference , Volume 1 , May 2022, forthcoming.

[4] Almeida T., Comber R., Wood G., Saraf D. and Balaam M. (2016). On looking at the vagina through Labella. Proc. of the 2016 CHI Conf. on Human Factors in Computing Systems (pp. 1810-1821).

[5] Tran B. and Choi L. N. (2018). Menstrual maze: A toy exploring public engagement in menstrual health education. Proc. of the 2018 CHI Conf. on Human Factors in Computing Systems (pp. 1-6).

[6] Diehl J. C. and Salarić P. (2020). How to design for taboos? A design intervention to overcome the taboo of menstruation in India. In E. Duarte, & C. Rosa (Eds.), Proceedings book of UNIDCOM/IADE Conferences (pp. 213-222) http://senses2019.unidcom-iade.pt/

[7] Søndergaard M. L. J. and Hansen L. K. (2016). PeriodShare: A bloody design fiction. In *Proceedings of the 9th Nordic Conference on Human-Computer Interaction* (pp. 1-6).

[8] Wilde D. (2022). Shitty food-based world-making: Recasting human microbiome relationships beyond shame and taboo. *Futures*, *136*, 102853

[9] Helms K. (2019, June). Do you have to pee? A design space for intimate and somatic data. In Proceedings of the 2019 on Designing Interactive Systems Conference (pp. 1209-1222).

[10] Trondsen J. (2015). Hvordan designe for seksuell velvære. NTNU Master Thesis, http://hdl.handle.net/11250/2417114

[11] Carlsen R. N. (2021). Hvordan designe for å unngå seksuell tabu. NTNU Master Thesis https://hdl.handle.net/11250/2983243

[12] Janøy K. (2021). Kort om nudes - Utforskning av hvordan designintervensjoner kan hindre ufrivillig spredning av nakenbilder. NTNU Master Thesis, https://hdl.handle.net/11250/2834798

[13] Lillegård M. H. (2021). Rethinking Gender in Design. NTNU Master Thesis, https://hdl.handle.net/11250/2834797

[14] Lillegård M. H., Trondsen J. K. and Boks C. (2021). Encouraging Reflection on Gender Bias in Design Education. In *DS 110: Proceedings of the 23rd International Conference on Engineering and Product Design Education (E&PDE 2021), Herning, Denmark. 9th-10th September 2021*.