


Shame cues: detecting shame in disguise and playing with new perspectives to inform the design process

June Kyong Trondsen 

Norwegian University of Science and Technology, Norway

 june.k.trondsen@ntnu.no

Abstract

This paper describes the creation of a tool named Shame Cues, a card deck consisting of 64 cards describing sociocultural concepts related to shame. The tool arose as an experiment to articulate an entanglement of diverse shame discourses into something relevant for designers. Building on the experience of using Shame Cues, the paper discusses how Shame Cues can support exploring the role of shame as given implicitly, through cultural manifestations, and in a practical sense, and how such an investigative lens can inform designers with more critical perspectives.

Keywords: design methods, design research, self-conscious emotions, critical design, shame

1. Introduction

The simple word shame can imply a multitude of things. It can remind us about a painful memory, a self-experienced event, an uncomfortable bodily reaction, or feelings of self-doubt or regret. It can also remind us of when others told us we were bad when we did something wrong or our feelings of righteousness when calling someone out. It can remind us of the relief of not being blamed or the joy of feeling proud. It can make us think of a funny but embarrassing story or feelings of empathy towards others' silly mistakes. A year ago, shame could mean not wearing a COVID face mask or social media hashtags like #MeeToo, while some more years ago, it could mean for women to wear the wrong length of skirt. In some cultures, shame can mean eating certain types of food or wearing shoes indoors; in others, it could be expressing an identity that opposes religious traditions. All these many variations in how we think, feel, or talk about shame, on an individual or a societal level, illustrate an interesting juxtaposition: Despite shame being a well-known and almost omnipresent emotion, it also quickly turns into an unclear and somewhat slippery notion. Divergent perspectives within disciplinary discourses further emphasize this (Kollareth et al., 2021; Sedighimornani, 2018). While some scholars may distinguish shame as a bio-cultural emotion (Röttger-Rössler and Markowitsch, 2009), others might classify shame within groups of other self-conscious emotions (Tracy and Robins, 2004) based on its ability to convey norms and moral values (Tangney and Stuewig, 2007) or by its social features (Hareli and Parkinson, 2008). Albeit there is no clear consensus on the definition or limits of shame, most scholars (as well as our everyday experience) seem to agree that shame is an important emotion and a powerful social concept. It connects us to how we feel about ourselves, connect to each other, engage with our surroundings, build our culture, and structure our society.

This challenge of defining shame serves as a prelude for this paper and builds upon an ongoing research project exploring the role of shame in design. Most approaches within design research focus on evoking positive emotions and avoiding negative experiences. Although this aligns well with

psychological understandings of shame as a painful and sometimes harmful emotion (Scheff, 2003), it leaves little room to explore shame more nuancedly, which may be a missed opportunity to explore its effect in other (potentially positive) ways. As designers aim to improve people's lives, emotions often form a dichotomy between desirable and undesirable and pleasurable and unpleasurable (Fokkinga and Desmet, 2013). Still, a subset of design researchers focuses on the role of negative emotions in design, acknowledging that our emotional spectrum is more nuanced than solely feeling good or bad. However, there seems to be a need for more literature reflecting designers' ability to understand and engage with the concept of shame, especially beyond emotional frameworks grounded in psychological theories (Trondsen and Boks, 2022). Considering shame's social and moral capacity and its close relation to other social concepts such as stigma and taboos, but also cringe, awkwardness, and guilty pleasures, it becomes interesting to question designers' current notion of shame. Is it possible to conceptualize shame beyond what is captured by current frameworks in design? Can it account for the multiple shame discourses existing across theories, disciplines, and cultural understandings? Furthermore, could such a concept translate into a tool that can inform, add value, or even novel perspectives to the design practice?

To further discuss (but not conclude on) these questions, this paper describes the process of creating a design tool named Shame Cues. The paper starts with the research background for creating this tool and the shame conceptualization the tool is based upon. Next, the tool and its creation process will be presented, followed by a brief introduction of how the tool has been taken into use. The discussion will focus on three ideas emerging through creating and testing Shame Cues, highlighting examples of how these ideas apply to individual cards. Finally, there will be a reflection on the overall value of the tool and implications for future research.

2. Design & shame research

For designers engaging with norms, behaviors, and socially complex issues, it is not hard to imagine how certain social phenomena and practices become intertwined with taboo, stigma, and shame and how self-conscious emotions with a negative valence, such as shame, play a role in what people say and do (but also in what people do not say and do). It is not the act of feeling shame that interests the author but how our reluctance to deal with shame can act to draw boundaries, hide opportunities, and empower certain storylines. A recent scoping review by the author provides the prelude for research in this area by covering a broad range of perspectives, drawing predominantly on design literature but also on theories from psychology and sociology, as in these fields, shame and similar emotions have been more thoroughly elaborated (Trondsen and Boks, 2022). In addition, shame concepts derived from environmental studies, marketing, linguistics, philosophy, and art, as well as nonliterate works and examples from cultural productions (e.g., art installations, social campaigns, commercial advertisement, and media entertainment), were included to make up for potential gaps and give more room to discuss implications for design.

This also included reviewing specific design tools and guidelines concerning shame, taboo, and sensitive topics. Although not abundant, literature provides some examples of design projects that explicitly address taboo and shame thematically. Diehl and Salarić (2020) suggest seven building blocks in designing for taboos, Penin and Soruco (2020) created a semiotic card deck inviting participants to identify social inequality and ethical dilemmas, and Torkildsby and Vaes (2019) explore how critical design and a "Stigma Free" toolkit can identify and battle stereotypes, stigma, and discrimination. One recurrent topic is that of female intimate care and taboos concerning bodily fluids. Various papers present design-led approaches to engage participants in addressing menstrual taboos or female pelvic fitness (Almeida et al., 2016; Tran and Choi, 2018; Diehl and Salarić, 2020; Søndergaard and Hansen, 2016); others use participatory workshops and autoethnographic inquiry to explore shame and other forms of bodily excretion and its relevance to our everyday function and well-being (Wilde, 2022; Helms, 2018).

Shame as a cluster concept

The scoping review led to a conceptualization of shame in which other related concepts such as aversive emotions, moral emotions, social emotions, ostracism, taboo, stigma, vicarious embarrassment,

humiliation, guilt, shyness, awkwardness, and embarrassment also were included since these often appear about each other. Shame experiences are varied and multiple in their expression, and converging shame into a single entity can be challenging, as evidenced by the many different disciplinary definitions and cultural understandings of the meaning of shame. With various accounts for the same emotion and little convergence, it becomes challenging to identify which shame discourse is most sensible for design. Despite many promising theories from social psychology that align well with perspectives within emotional-, behavioral- and social design, observing how we talk about, behave according to, and produce shame through culture seems to depict a granularity of shame that exceeds what is captured by current frameworks. Shame can take shape as theoretical and cultural concepts, and for a design context, a meaningful conceptualization could bridge those two. This view is similar to some interdisciplinary perspectives highlighting the difference between shame as a scientific term and shame as a folk term and suggesting a bifurcated approach, combining psychological aspects with how the word is used in everyday language and through associated concepts (Kollareth et al., 2021). Similarly, in this paper, shame is not seen as a distinct and single emotion, distinguished and separated from other emotions or social phenomena, but rather as a cluster concept with an internal structure that bridges theory and culture across disciplinary discourses and that inhibits features which can manifest itself and act in multiple ways. Despite such blurry borderlines, using such a cluster concept understanding of shame, allowing different discourses to exist simultaneously and within a cultural context, seems to suit the designerly ways of knowing (Cross, 1982). However, practical implications arise when suggesting such theoretical conceptualization. How can this be adapted and put into design practice? Or, more specifically, could this translate into a vocabulary that can add value or even novel perspectives to the design process?

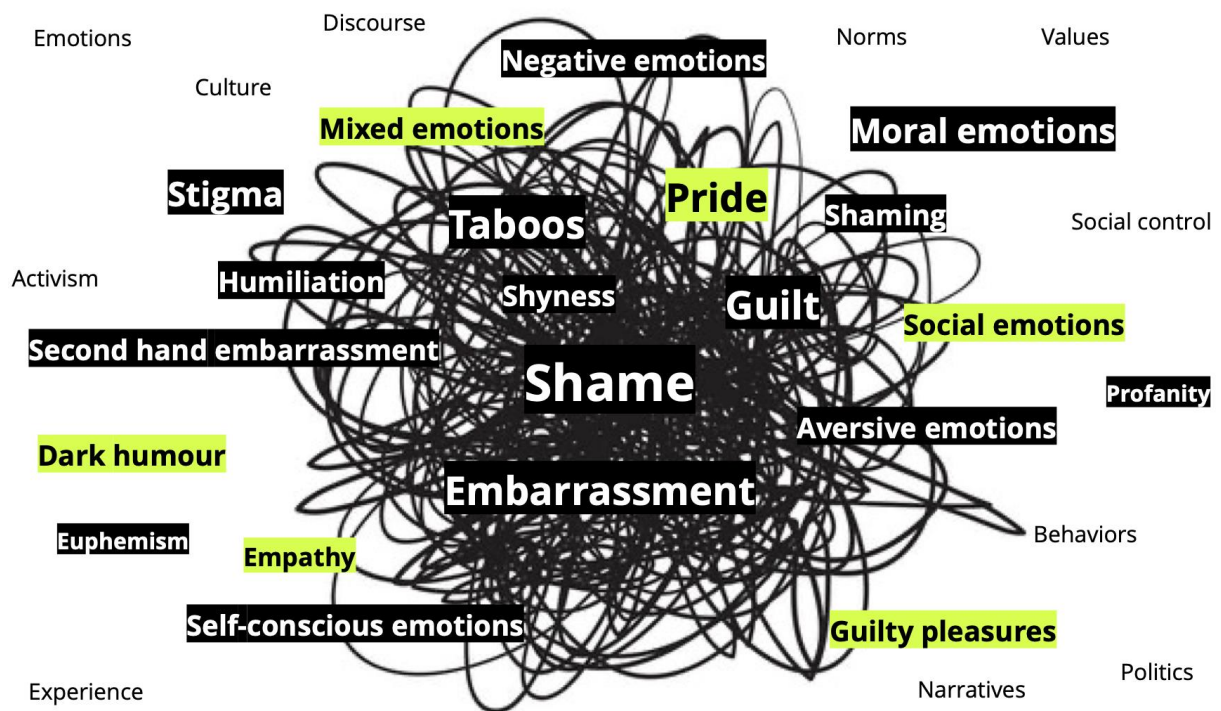


Figure 1. Shame as a "cluster concept".

3. Shame Cues

This inquiry was a starting point for developing a more tangible and perhaps more inspiring way to include shame concepts in the design process. Later named Shame Cues, the tool arose as an experiment to articulate this entanglement of many diverse shame perspectives and discourses into something relevant for designers to understand and practical for designers to use. In contrast to the

more traditional understanding of emotions in design, often following a dichotomy between positive and negative emotions, the intention of creating Shame Cues was to experiment to see if a cluster-like conceptualization of shame could bring value to design beyond the limitations of current typologies and frameworks. The assumption, and to some extent grounded in experience from supervising stigma and taboo-related master projects in design (Boks and Trondsen, 2022), was that providing designers with a lens to see and a vocabulary to talk about shame could allow for new and more nuanced perspectives to inform the design process. However, this interest in the operationalization of shame in the design practice should not be confused with an instrumentalization of shame per se but rather an experiment to see whether addressing shame in more attentive ways is valuable and inspiring for designers.

In simple words, Shame Cues is a card deck of 64 cards describing sociocultural concepts that relate to shame (e.g., guilty pleasure, morbid curiosity, and political correctness) divided into 16 categories (e.g., guilt, dark attraction, and moralizing) (table 1). Each card, with a given title, image, and text, illustrates a phenomenon or manifestation of shame in society, and each card is designated to a category according to the emotional granularity or shame feature characterizing the card. In sum, the Shame Cues cards gather and embed multiple shame discourses expressed into a vocabulary with a closer affinity to everyday speech. Much like the cluster concept understanding of shame described in Chapter 2, the card deck positions shame in a node connecting multiple disciplinary understandings, combining scientific terms with folk terms and bridging theory with culture. The cards make use of a broad range of familiar concepts such as “scapegoating” and “profanity” to show how shame and other self-conscious emotions (such as embarrassment and guilt) take part in our social interactions and everyday life and play a role in expressing our social fabric. Much of how the cards are captured, verbalized, illustrated, and described stems from theoretical explanations combined with observations from social interactions, cultural production, physical objects, and public discourse, and in many cases, extracted from various non-academic and informal platforms utilizing online user-generated content such as Urban Dictionary, Wikipedia, Imgur, Reddit, Quora and so on.

Table 1. Overview of the Shame Cues card deck (categories in bold)

<p>Exaggeration Sarcasm Camp Shamelessness Satire</p>	<p>Counter action Counterculture Reappropriation Subculture Civil disobedience</p>	<p>Humor Dad jokes Dark humour Schadenfreude Irony</p>	<p>Vulgarity Taboos Profanity Karen stereotype Vulgarism</p>
<p>Dark attraction Morbid curiosity Forbidden fruit Innuendo Neophilia</p>	<p>Pleasure Benign masochism Naughtiness Guilty pleasure Eccentricity</p>	<p>Secrecy Closeting Snooping Eavesdropping Sweeping under the rug</p>	<p>Softening Euphemism Metaphors Stylizing Awkward turtle</p>
<p>Covering Pardon my French Gedoogbeleid Sanitizing Sugarcoating</p>	<p>Awkwardness Oversharing Personal space invasion Verbosity Awkwardness</p>	<p>Embarrassment Pussyfooting Cringe Vicarious embarrassment Overpraising</p>	<p>Slang Cheesiness Tackiness Corniness Geekiness</p>
<p>Guilt Confession Guilt tripping Guilt hibernation Sympathy card</p>	<p>Moralising Sanctimommy Political correctness Holier-than-thou Outrage culture</p>	<p>Humiliation Public humiliation Walk of shame Badge of shame Mockery</p>	<p>Separation Scapegoating Stigmatizing Cancel culture Shunning</p>

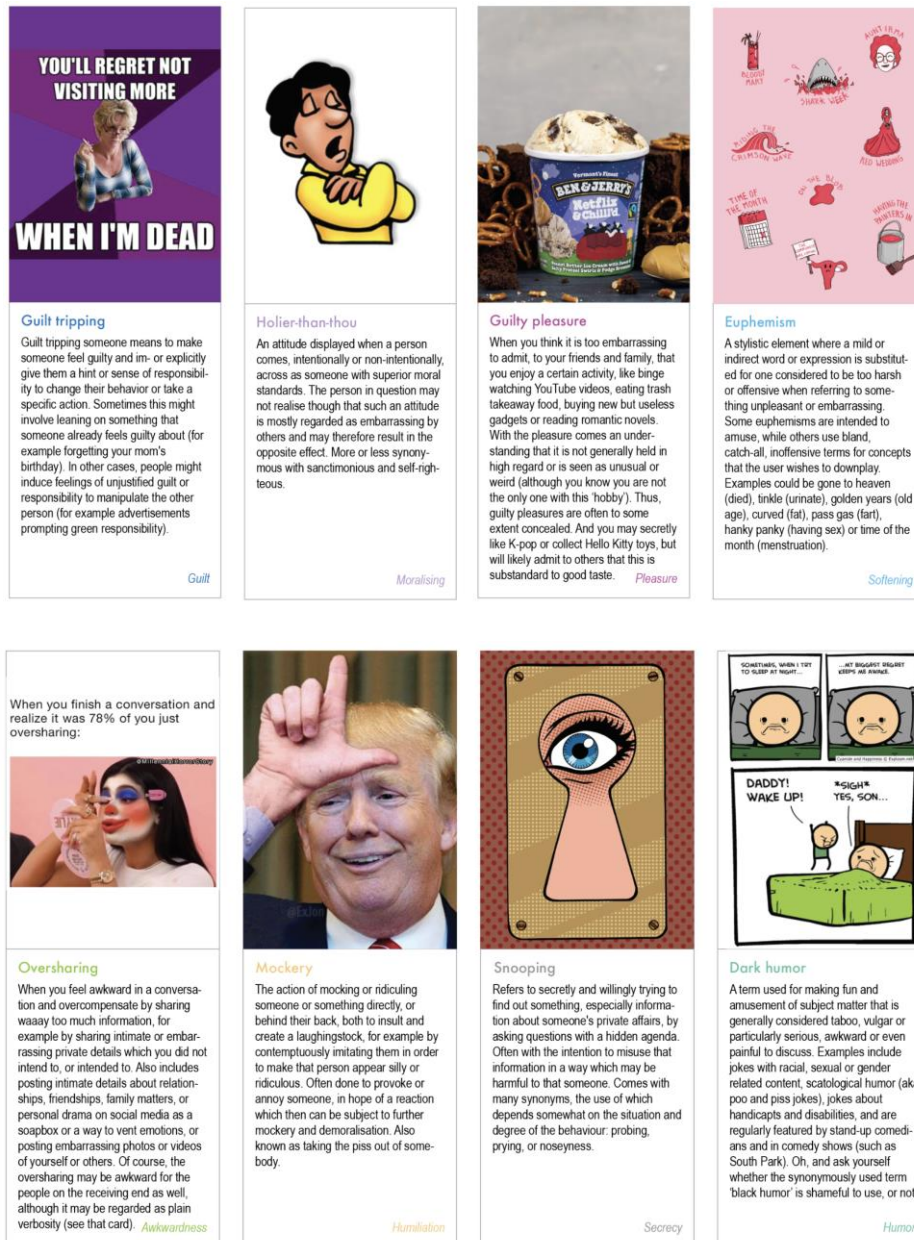


Figure 2. Eight examples of Shame Cue cards

Design & shame workshops

The card deck was completed in January 2022 and iterated through nine workshops between February 2022 and February 2024. In addition, Shame Cues were used by students in the Design department at NTNU (Trondheim) who had chosen taboo-prone, sensitive, stigma- or shame-related topics for their master thesis projects. Between August 2020 and November 2023, about 12 master projects were introduced to this tool or its precursor. Although these projects provided valuable insights and empiric data for further developing Shame Cues (Boks and Trondsen, 2022), the rest of this paper focuses on the workshops in which Shame Cues were introduced and made use of in a more structured manner (table 2). For the various workshops, Shame Cues were either introduced by themselves or in combination with other prototyped shame tools (Trondsen and Boks, 2023A). The topics for these workshops ranged from working on stigma or taboo-related topics, being concerned with unsustainable behaviors, investigating social phenomena, redesigning technology, or questioning the meaning of mundane everyday objects. They would also range between including student groups on the bachelor level to master and Ph.D. students, other design academics, and conference participants.

Table 2. Workshop overview

Date	Organizer (location)	Title	Description
Feb. 2022	Xplore Design Week 2022 at the University of Antwerp (Antwerp)	«Design for/with/ against/ without shame»	5-day workshop with 16 bachelor-level product design students divided into four groups. The workshop focused on shame, taboo, and sensitive topics and involved all stages of the design process (from insights to ideation). It included testing various "shame tools" (see Trondsen and Boks, 2023), with resulting design concepts presented in an exhibition on the final day.
June 2022	Joint research collaboration w/the Product Development Department at the University of Antwerp (Trondheim)	"Pee Poo Period"	2-day workshop with eight design, architecture, and art students and researchers divided into three groups. The workshop focused on the intersection between bodily fluids, single-use hygiene products, sustainability, taboos, and shame. It included testing various "shame tools" (see Trondsen et al., 2022), resulting in speculative design concepts presented on the final day.
Feb. 2023	"Sustainability Transformation" course (MSc Master) with the Design Department at NTNU (Trondheim)	"Shame Cues"	3-hours workshop with 20 master-level design students. The workshop focused on using Shame Cues to investigate and discuss social phenomena and behaviors related to the various sustainability challenges the students worked on for the semester.
Feb. 2023	Xplore Design Week 2023 at the University of Antwerp (Antwerp)	"Unimaginable design"	5-day workshop with 16 bachelor-level product design students divided into four groups. The workshop focused on shame, taboo, and sensitive topics and involved all stages of the design process. It included multiple exercises in which the students would use Shame Cues to investigate and critique a social phenomenon or practice and ideate for possible interventions. The resulting design process and developed concepts were presented in an exhibition on the final day.
April 2023	Cumulus 2023 Conference, Connectivity and Creativity in times of Conflict (Antwerp)	"Shame Cues"	2-hours workshop with six conference participants. The workshop focused on using Shame Cues to investigate and discuss shame related to topics such as flying, vegan food, coffee consumption, and single-use hygiene products, and in a sustainability context.
June 2023	NORDES 2023 Conference, THIS SPACE INTENTIONALLY LEFT BLANK (Linköping)	"Shame Cues"	1-day workshop with 12 conference participants divided into three groups (see, Trondsen and Boks, 2023B). The workshop focused on mundane everyday objects and using Shame Cues to gain new insights and critical perspectives, with the intention of rethinking the problem-framing stage of the design process.
June 2023	Joint research collaboration w/ Department of Management and Engineering at Linköping University (digital Trondheim/ Linköping)	"Shame Cues"	3-hour workshop with three design researchers (see Trondsen et al., forthcoming). The workshop focused on sustainable design interventions and using Shame Cues to explore ways in which shame can promote (or hinder) anti-littering behaviors.
Aug 2023	"Advanced design processes" course (MSc Master) with the Digital Design department at ITU Copenhagen (Copenhagen)	"Shame Cues"	4-hours workshop with approx. 120 design students divided into 23 groups. The workshop focused on using a selection of 16 Shame Cues to investigate certain technology advancements concerning shame and social norms and redesign these into critical- or speculative design concepts.
Feb 2024	International Design Week 2024 at the University of Antwerp (Antwerp)	"Design for Deviance"	5-day workshop with eight master-level students in architecture and interior design. The workshop focused on critical design approaches and using the notion of deviance, shame, and abnormality (with guidance from Shame Cues) to evolve critical perspectives, question norms, and social narratives, resulting in a group exhibition on the final day.

As the workshops' duration indicates, the workshops' extensiveness also varied to include larger or smaller parts of the design process; some would focus on gaining insights and identifying problems, others on inspiration, ideation, and developing intervention. For instance, in the Xplore Design Week 2023 workshop, the participants spent five days applying Shame Cues throughout the design process, from studying a phenomenon to framing a problem and exhibiting a final concept. For the Pee Poo Period workshop (figure 3, left) (Trondsen et al., 2023), the participants spent two days following much of the same process but with a focus on the intersection between taboos and sustainability and speculative design. The NORDES (figure 3, right) (Trondsen and Boks, 2023B) and ITU Copenhagen workshop followed a shorter format, applying Shame Cues to the initial part of the design process and as a critical lens to study norms and to frame (or reframe) a problem statement.



Figure 3. Shame Cue workshops; Left: "Pee, poo, period" 2022; Right: NORDES 2023

4. Discussion

This paper has presented the background and process of creating Shame Cues and briefly introduced how the cards have been taken into use. Although the cards are unsystematically composed as part of an experimental exercise in conceptualizing shame, the process of creating and testing these cards has spurred some reflections. To further discuss how Shame Cues can add perspectives to inform the design process, the following discussion is structured according to three emerging ideas relating to how shame can take different shades, shapes, and functions. These ideas reflect a particular understanding of shame and, as shown through examples, correlate to the content embedded in the cards. However, these ideas are not so much derived from the activity of reading the cards themselves but rather through the practice of studying, discussing, understanding, and critically questioning how the content of each card relates to a phenomenon or a topic at hand or in the act of gaining inspiration and imagining new ideas, alternative or opposite outcomes.

Shame can take different shades

How we define and single out emotions, in theory, might look different from how we experience them in everyday life, and for emotions that are closely related (such as shame, embarrassment, and guilt), they might be experienced interchangeably, in combination with each other or in nuances ranging from mild intensities (e.g., awkwardness) to rather extreme (e.g., vulgarism). Although the concepts most closely related to shame, such as guilt, embarrassment, stigma, and taboo, are usually seen in connection to each other by many scholars, how we recognize these concepts in everyday life or talk about these concepts through everyday speech is often more fluid, contextual and might not always coincide with the technical terms. For instance, one might speak of an experience of being "guilt tripped" into doing something. In contrast, some psychologists would refer to this as an experience of combined shame and guilt or actions of ostracism. In other cases, we would use folk terms, such as "shamelessness," "tackiness," or "cringe," to depict a nuance of shame beyond what is commonly found in scientific

literature. These granularities, or shades of shame, are captured across the categories of cards but also within each category. For instance, the "humiliation" category stretches from mild actions such as "mockery" to more intense feelings of exclusion such as "public humiliation" and "walk of shame." These nuances of shame are also expressed through other shame features, such as differences in how shame is experienced by oneself (e.g., guilt hibernation) or by others (e.g., vicarious embarrassment). In addition, the combination of shame with other emotions can also be expressed through mixed-emotion experiences, illustrating how we can feel shame or embarrassment but also positive emotions such as pleasure, amusement, or interest at the same time (e.g., schadenfreude, dark humor, and morbid curiosity).

Shame can take different shapes

Uttering "Oh, how embarrassing" or exclaiming "Shame on you!" can exemplify the explicit and more verbal ways in which shame can be expressed while blushing cheeks, a lowered head, or other signs of discomfort can illustrate how shame is made visible through bodily reactions (Darwin, 1872). On the other hand, it is also possible to imagine how the existence of shame can take manifestation beyond what we explicitly say or show with our bodies. Take, for instance, how we use metaphors or euphemisms to avoid taboo language or how we tend to stylize visual elements to avoid vulgar depictions. This understanding of shame as extraverbal communication and implicitly conveyed through various manifestations is also embedded in the Shame Cues and relies on phenomenology and semiosis as a mode of interpretation. In this sense, the cards do not explicitly communicate shame by themselves, but in our interpretation, they signal something cultural we add. They implicitly say something about right and wrong, shameful and not, but only through our own cultural interpretation. Following this sequence of thoughts, it becomes clearer how Shame Cue cards such as "guilty pleasure" rely on a socio-cultural context and a common understanding of how something immoral can induce guilt and juxtapose perceptions of indulgence and pleasure. This way of seeing shame manifestations allows for exploring a broad spectrum of phenomena, artifacts, and social interactions, relating cards to ridicule, entertainment, hygiene, food, advertisement, and art. Although some cards can be theorized according to humor theory (e.g., dark humor, satire, and cringe), discourse studies (innuendo, softening, euphemism, and stylizing), or other linguistic theories (e.g., metaphors, irony, and sarcasm), some of the cards also rely on manifestations that are familiar through folk terms, but with little theoretical explanations (e.g., dad jokes, tackiness, and cheesiness).

Shame can take different functions

Much connected to research exploring the role of shame in design strategies (Trondsen and Boks, 2022.), the cards are made to reflect aspects of how shame can take different roles and fulfill different purposes when intentionally (or unintentionally) included in the design. The suggested strategies in this research illustrate how shame can be induced, emphasized, mitigated, or disclosed and used in affirmative and norm-critical design strategies, examples of which we see in many products and campaigns around us. For instance, shame can be induced to correct misbehavior (e.g., cancel culture, guilt-tripping, and shunning), as well as to promote pro-social behaviors or to communicate moral standards (e.g., political correctness and holier-than-thou). While inducing shame can be efficient in creating aversion, emphasizing shame can also act to cause attraction. Many of the examples in the "dark attraction" and "pleasure" categories illustrate concepts of how mixed emotions and juxtaposition between personal desires and social norms can make us laugh (e.g., dark humor), draw to our attention (e.g., innuendo) or create temptations (e.g., naughtiness). Attempting to reduce or mitigate shame by softening techniques related to our language (e.g., euphemisms), visual representations (e.g., stylizing), or other coping mechanisms (e.g., sugarcoating) illustrate how our reluctance and avoidance behavior towards feeling shame can create strong thresholds and maintain specific structures. On the opposite hand, many of the cards also demonstrate how a particular disclosure of shame by provocation (e.g., shamelessness) counteracting social conventions (e.g., counterculture) or playing with norm transgression (e.g., satire) can be efficient in criticizing those same narratives, to challenge and question the status quo.

A tool, a vocabulary, a conceptualization, or a lens?

Throughout this paper, Shame Cues have mostly been referred to as a tool, but as the title above suggests, this wording can also pose some limitations. Including the ideas from the above discussion, one can summarize that the tool's inquiry explores the role of shame as given implicitly, through cultural manifestations, and in a practical sense. Simultaneously, the experience of using this tool with designers reflects the simple value of having a vocabulary to identify and talk about shame in all its nuances, broaden one's reflections, and enable discussion with others. Given the initial research inquiry of looking for a "more suitable" shame conceptualization, the experience from creating and testing Shame Cues also indicates the usefulness of a conceptualization that accounts for various shame discourses, that allows for contextualization to be used for multiple purposes and with an ability to reflect how shame rebinds the social fabric. Furthermore, using Shame Cues in different workshop setups illustrated how the cards can be a valuable lens to investigate, evaluate, and intervene with specific topics. What interests the author most are the critical perspectives that arise when Shame Cues (or the shame lens) are used through different stages of the design process. In many cases, manifestations of shame were also connected to norms, conventions, and moral values, outlining the discursive boundaries for what is considered normal, accepted, idealized, or cherished. Perhaps best illustrated through the last workshop at ITU Copenhagen (2023), where design students were challenged to use a selection of Shame Cues to redesign technology (e.g., music streaming and location sharing), the outcome was less oriented towards creating affordable, usable, or accessible products, but rather towards critical questions, speculations, and concerns regarding the future. As with this workshop and many others, using shame to investigate, evaluate, and reflect on one's moral judgments seems helpful in evolving more critical perspectives. Thus, a fruitful way to further explore shame as a tool, vocabulary, conceptualization, or lens could be in the direction of how Shame Cues can aid designers in more critical and reflexive design practice.

5. Conclusion

This paper describes the background for and process of creating a design tool named Shame Cues and elaborates on the shame conceptualization upon which the tool is based. Shame Cues is a card deck comprising 64 cards divided into 16 categories, describing sociocultural concepts related to shame and similar self-conscious emotions. The tool arose as an experiment to articulate an entanglement of many diverse shame perspectives and discourses into something relevant for designers to understand and practical for designers to use. Based on the practice of using Shame Cues in multiple workshops, the paper identifies three emerging ideas relating to how shame can take different shades, shapes, and functions. Building upon these ideas, the paper reflects upon how Shame Cues can support exploring the role of shame as given implicitly, through cultural manifestations, and in a practical sense. In many cases, such manifestations were also connected to norms, conventions, and moral values, outlining the discursive boundaries for what is considered normal, accepted, idealized, or cherished. Thus, a fruitful way to further explore Shame Cues could be to use it as an investigative lens to inform the design process with critical perspectives and support more reflexive design practice.

References

- Almeida, T., Comber, R., Wood, G., Saraf, D., and Balaam, M. (2016). "On looking at the vagina through Labella.", *CHI '16: Proceedings of the 2016 CHI Conf. on Human Factors in Computing Systems, May 2016*, pp. 1810-1821. <https://doi.org/10.1145/2858036.2858119>
- Boks, C. and Trondsen, J.K. (2022), "Reflections on Addressing Taboo, Shame and Social Stigma in Design Projects.", *DS 117: Proceedings of the 24th International Conference on Engineering and Product Design Education (E&PDE 2022), London South Bank University, London, UK, Sept. 8-9, 2022*. <https://doi.org/10.35199/EPDE.2022.9>
- Cross, N. (1982), "Designerly ways of knowing", *Design studies*, Vol. 3, No. 4, pp.221-227. [https://doi.org/10.1016/0142-694X\(82\)90040-0](https://doi.org/10.1016/0142-694X(82)90040-0)
- Darwin, C. (1872), "Self-Attention, Shame, Shyness, Modesty; Blushing", *The Expression of the Emotions in Man and Animals*, Appleton & Company, p. 309-346.
- Diehl, J. C., and Salarić, P. (2020). "How to design for taboos? A design intervention to overcome the taboo of menstruation in India", In: Duarte E. and Rosa C. (Eds.), *Proceedings book of UNIDCOM/IADE Conferences*, pp. 213-222. <http://senses2019.unidcom-iaede.pt/>

- Fokkinga, S. and Desmet, P. (2013), "Ten Ways to Design for Disgust, Sadness, and Other Enjoyments: A Design Approach to Enrich Product Experiences with Negative Emotions", *International Journal of Design*, Vol. 7 No. 1, pp. 19-36. <http://www.ijdesign.org/index.php/IJDesign/article/view/1180>
- Hareli, S. and Parkinson B. (2008), "What's Social About Social Emotions?", *Journal for the Theory of Social Behaviour*, Vol. 38 No. 2, pp. 131–156. <https://doi.org/10.1111/j.1468-5914.2008.00363.x>
- Helms, K. (2019), "Do you have to pee? A design space for intimate and somatic data", *DIS'19: Proceedings of the 2019 on Designing Interactive Systems Conference, June 2019*, pp. 1209-1222. <https://doi.org/10.1145/3322276.3322290>
- Kollareth, D., Mariko Kikutani, M. and Russell, J. (2021), "Shame is a Folk Term Unsuitable as a Technical Term in Science" In: Mun, C (Ed.), *Interdisciplinary Perspectives on Shame: Methods, Theories, Norms, Cultures, and Politics*, Lexington Books, London, pp. 3-26.
- Penin, L.S. and Soruco, A.Y. (2020). "The worker's tarot. A tool for designer-worker solidarity", *Linköping Electronic Conference Proceedings*, Vol. 173, No. 70, pp. 611-612. https://ep.liu.se/en/conference-article.aspx?series=ecp&issue=173&Article_No=70
- Röttger-Rössler, B. and Markowitsch, H. J. (2009), *Emotions as bio-cultural processes*, Springer, New York. <https://doi.org/10.1007/978-0-387-09546-2>
- Scheff, T. (2003), "Shame in Self and Society", *Symbolic interaction*, Vol. 26 No. 2, pp. 239–262. <https://doi.org/10.1525/si.2003.26.2.239>
- Sedighimornani, N. (2018), «Shame and its Features: Understanding of Shame», *European Journal of Social Sciences Studies*, Vol. 3 No. 3, pp. 75-107. <http://dx.doi.org/10.5281/zenodo.1453426>
- Søndergaard, M. L. J. and Hansen, L. K. (2016). "PeriodShare: A bloody design fiction", *NordiCHI'16 Proceedings of the 9th Nordic Conference on Human-Computer Interaction, Oct. 2016*, No. 113, pp. 1-6. <https://doi.org/10.1145/2971485.2996748>
- Tangney, J.P., Stuewig, J. and Mashek, D.J. (2007), "Moral Emotions and Moral Behaviour", *Annual Review of Psychology*, Vol. 58, pp. 345-372. <https://doi.org/10.1146/annurev.psych.56.091103.070145>
- Torkildsby, A. B. and Vaes, K. (2019). "Addressing the issue of stigma-free design through critical design workshops", *Proceedings of the 21st International Conference on Engineering and Product Design Education (E&PDE 2019)*, University of Strathclyde, Glasgow, Sept. 12-13. <https://doi.org/10.35199/epde2019.11>
- Tracy, J., and Robins, R., (2004), «Putting the Self Into Self-conscious Emotions: A Theoretical Model», *Psychological Inquiry*, Vol 15 No. 2, pp. 103–125. https://doi.org/10.1207/s15327965pli1502_01
- Tran, B. and Choi, L.N. (2018), "Menstrual maze: A toy exploring public engagement in menstrual health education", *CHI Conference on Human Factors in Computing Systems, Montreal QC Canada, April 21-26, 2018*, Association for Computing Machinery, New York, pp. 1-6. <https://doi.org/10.1145/3170427.3180649>
- Trondsen, J. and Boks, C. (2022), "Exploring the Role of Shame in Design Strategies", *Proceedings of the Design Society, DESIGN 2022, May 2022*, Vol.2, pp. 2233-2242. <https://doi.org/10.1017/pds.2022.226>
- Trondsen, J. and Boks, C. (2023A), "A Toolbox for addressing shame in design projects", *DS 123: Proceedings of the International Conference on Engineering and Product Design Education (E&PDE 2023)*, Barcelona, Spain. Sept. 7-8, 2023. <https://doi.org/10.35199/EPDE.2023>
- Trondsen, J.K. and Boks, C. (2023B), "Shame Cues" In: Rodrigues, V., Westin, C., and Holmlid, S. (eds.) *Proceedings of Nordes 2023: This Space Intentionally Left [Blank]*, June 12-14, Norrköping, Sweden, p.445-446. <https://doi.org/10.21606/nordes.2023.cv>
- Trondsen, J.K., Herweyers, L., Boks, C. and Dubois, E. (2023), "Pee poo period: exploring the intersection between shame, bodily fluids, and sustainable design", *Cumulus Conference Proceedings, Antwerp 2023*, Gent, Academia Press, p. 413-418. <http://dx.doi.org/10.26530/9789401496476-081>