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Empathy and exclusion in the design process

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Designers are now taught that empathy with users is crucial to technology design. We offer a warning that this dictum and its implementation, despite admirable intentions, can promote exclusion in design: Empathy will not bring the desired benefit to the design process if it is naively construed and understood as a feminine trait, if shortcuts are used to allegedly take the effort out of the empathic process, or if the social situation in which empathy is taking place is not considered. We show that these issues are closely coupled in design practices. Using personas—fictitious descriptions of people used to make users visible in the design process—as an example, we argue that the danger of reifying gendered assumptions might be inherent in those methods and tools in human-computer interaction research that are supposed to enable and strengthen empathy.

KEYWORDS

empathy, feminist, HCI, personas, design, gender, bias

Introduction

There are wide-ranging claims regarding the role that heightened empathy could play in our world, going as far as to hope more empathy is key to solving global problems like the destruction of the biosphere (Rifkin, 2009). In this line of thought, empathy supposedly becomes the guarantee for successful collaboration: in teams and work groups, in projects, in participatory design processes, between managers and employees, between developers and users, between sales people and customers. This optimism seems to favor the increasingly inflationary use of the term, and to be against empathy would be "a perverse stance, by any measure" (Lobb, 2013). Empathy is considered indispensible; designers of technical products should have it so they can grasp or anticipate requirements, wishes, and needs of future users and so they can reliably reflect them in the resulting product (Wright and McCarthy, 2008; Drouet et al., 2022; Surma-Aho and Hölttä-Otto, 2022). A wide range of tools is supposed to place members of a design team in the users' lived and felt experience to evoke empathetic responses (Bollmer, 2017; Pratte et al., 2021). In the design methodology Design Thinking, empathy is considered an essential ingredient, it is a prerequisite for the creation of new ideas and empathy tools have been specifically developed to ensure the connection to the target group (Carlgren et al., 2016).

Parallel to the expansive claims for empathy's promise, critical voices are increasingly drawing attention to the fact that the concept of empathy might prove unexpectedly problematic. Some authors point to the limits and dark sides of empathy: self-sacrifice and over-identification with other people that often is the cause of burnout in the helping

professions; but also a means for manipulation, a tool for psychopaths, and a cause for unreflective moral partisanship or moral blindness (Breyer, 2013; Bloom, 2016; Breithaupt, 2017).

As we will show, the multitude of hopes associated with the concept of empathy might actually reify gender stereotypes, because they come laden with dubious assumptions about gender differences and reflect a gendering of the politics of empathy (Lobb, 2013). Additionally, the importance of empathy for user-centered designing has lead to the development of practical techniques to support empathy—but these shortcut methods to "produce" empathy are often an oversimplification that does not do justice to the complexity of empathy (Siegel and Dray, 2019). And finally, the fact that design processes and with that the demand to empathize with future users usually take place in a team setting has received little attention—yet group and empathic processes are in competition with regard to cognitive and emotional resources, which can again reproduce stereotypical evaluations. Against this backdrop, the fuzziness of the concept of empathy may even be dangerous.

In the following, we present conceptualizations of empathy in relation to the construction of gender and situate them in the context of established methods and approaches to the development and design of technical artifacts. We go on to show how empathy is integrated in the design of technical artifacts. We complement the existing perspectives with a social psychological one that has received little attention in the design process and elaborate on how group dynamics in development teams can prevent empathy with potential and future users, perpetuate existing gendering of empathy, and produce new exclusions. Using the example of personas—a technique in which fictitious descriptions of people are used to make users visible in the design process—we problematize the unreflected use of tools that are supposed to promote empathy and draw initial conclusions for practice.

Empathy and gender

Empathy is an essential element of a binary gender construction: women are constructed as warm, social, and thus empathic, whereas men are constructed as competent and competitive—and then subsequently perceived as such (Fiske et al., 2007). Social psychological research shows that on the basis of existing gender stereotypes, empathic behavior of women is taken for granted (Cuddy et al., 2008). This in turn means there is no special appreciation if women show empathic behavior. What is then conspicuous about women is not the presence, but at best the absence of expected empathy. Accordingly, the absence of empathic behavior in women is severely punished in social contexts. In men, on the other hand, the absence of warmth can, under certain circumstances, lead to them being perceived even more positively in terms of their competence. So if men show empathic behavior, it is explicitly appreciated. They gain something in addition to their—according to the common stereotyping—presupposed competence. The "appropriation" of empathy on the part of men leads to a reinforcement of the perceived asymmetry between men and women. Mirroring the gendered perception of what is valuable and what is not, empathy seems to be perceived as easy to display. Competence, on the other hand, tends to be difficult and lengthy to acquire and cannot be invoked on demand. Part of gendering in the professional culture in tech is also the centrality of the construct "competence," which is reflected, for example, in the belief in meritocracy that disadvantages women (Ellemers and Barreto, 2009) or in the problem of permanently questioning the competence of women in tech, the so-called "prove it again!" bias (Williams et al., 2016).

Given that "the social" (and thus empathy) is central to the gendering of social perception, we thus cannot talk about empathy without problematizing its gendered undercurrent. The term itself, at the moment of its use, inevitably invokes the binary distinction male/female, which connotes other binary distinctions like competent/empathic or technical/social. The notion, now established in the context of technical artifact development, that empathy can be inserted into a design process in a purely technical-instrumental way thus cements anew the power relations inherent in a binary gender construction. Methods that supposedly stand in the service of promoting empathy and promise to bridge the aforementioned opposites must therefore be critically questioned: Does a method to bolster empathy really fulfill its fundamental promise of a better understanding of others in practice? This needs to be weighed against the extent to which a method conserves—unintentionally—the very distinctions and stereotypes it seeks to undermine.

With regard to gender politics in design processes, the difficulty in dealing with empathy lies in the ambivalence that comes with the gendered nature of the concept. On the one hand, empathy is an important element for the design of technical artifacts and needs to be recognized as such (Toombs et al., 2017). On the other hand, this appreciation of empathy needs to be done without the attribution of empathy to women—the "feminization" of empathy (Lobb, 2013). This delicate balancing act between problematically gendering empathy on the one hand and recognizing women's perspectives on the other has a long tradition in feminist research. The concept of empathy touches on central feminist issues such as the definition of science in the field of tension between a particularistic practice of life and a science that tends to be universalistic (Wohlrab-Sahr, 1993). Feminist researchers therefore question whether empathy, immersion in the world of others, and experiencing one's own concern are not prerequisites for the production of knowledge—and attribute these qualities primarily to women because of structural conditions and gendered socialization. Carol Gilligan developed the idea of women's "Different Voice" and shows how integrating perspectives of women is

a push toward greater objectivity. In her research on female morality, she shows that Lawrence Kohlberg's postulates on the universality of developmental stages in moral development do not apply equally to women and men—one of the reasons being that women are more likely to reason from empathic references (Gilligan, 1977). Sandra Harding's standpoint theory challenges the association of rationality and science by showing its linkage to male gender identity. She counters this with a concept of situated knowledge in which women bring other points of view (Harding, 1989). Again, empathy is a guiding difference: Sandra Harding argues that for women, a person is more likely to appear rational when that person is able to adopt the perspective of the concrete other and form attachments, whereas men are more likely to see a person as rational when that person is able to distinguish themselves from others and adopt the position of the generalized other. The privileging of women's experiences of life and oppression earned standpoint theory the accusation of essentializing gender difference (Buchmüller, 2016). Nonetheless, it has transformed feminist theorizing, particularly in the context of technical artifact design and use research, insofar as it brings marginalized perspectives into the center of attention (Bardzell, 2010; Rode, 2011; Draude, 2020).

Empathy in the design of technical artifacts

Regarding the development of technical artifacts, the focus on empathy has gained momentum over the past 20 years (Gray, 2016; Jiancaro, 2018). With the increasing prevalence of technology in all areas of life and human interaction, empathy has become increasingly important within the field of tech development and design research. A number of design methodologies are explicitly based on an empathic approach, e.g. Empathy-Based Co-Design (Mattelmäki et al., 2014), Empathic Product Design (Postma et al., 2012), Framework for Empathy in Design (Kouprie and Visser, 2009), Feminist Care Ethics Perspective (Toombs et al., 2017), or Empathy-Based Participatory Design (Lindsay et al., 2012).

Entering into an empathic relationship with the (potential) user at the very beginning of the design process is now considered a key skill to sufficiently address their needs and expectations (Wright and McCarthy, 2008; Kouprie and Visser, 2009; Rapanta and Cantoni, 2014). Behind this lies the assumption and expectation that empathy in the design team leads to a higher likelihood that the technical artifacts will actually meet users' expectations. The most important hope connected with empathic user research is that it allows the discovery of points that could not be found through classical market analyses.

The design methodologies mentioned above acknowledge that to drive design through empathy, it needs effort—and commitment to a wide range of user-centered design practices. Yet in the everyday practices of tech companies, the adaptation to pressures of the commercial world often leads to the tendency to reduce complex concepts to a template or a checklist. Siegel and Dray (2019) criticize this looking at so-called empathy maps as an example: Empathy maps seek to make visible users' underlying traits on a canvas. By default, this canvas covers the quadrants Says, Thinks, Does, and Feels. In Thinks the entry could be something like "What should I do now?", in Feels it might "Who can I trust to give me correct information?". Yet as Siegel and Dray point out, knowing a person's characteristic thoughts and feeling does not equate to empathy and abstracting general user characteristics from the context of specific user experience can only produce stereotyping, i.e., the opposite of deep understanding of another person.

Personas as an example

Besides empathy maps, the persona method is another prominent means to promote empathic engagement with future users in the design of technical artifacts (Marsden and Haag, 2016). Personas are fictitious descriptions of people that represent users and are intended to make them visible in the design process, taking into account multiple categories of difference with their characteristics, interests, and desires (Nielsen et al., 2013). Ideally they are based on user research, and they are usually presented as if they were real people, with a name and a photo to make the description as vivid as possible. Working with these pseudo-persons is supposed to more or less automatically trigger empathic processes (Marsden and Haag, 2016). As might be expected with a tool that is making use of the same mechanisms as our perception of other people, personas have been shown to be problematic from a gender perspective: Not only are they perceived in line with existing gender stereotypes, but they often are also created in a way that reifies gendered perceptions, e.g., regarding their interests or when the number of children is mentioned in female but not in male personas (Marsden et al., 2015, 2017; Marsden and Haag, 2016).

Additionally, we need to consider that design processes typically take place within a team. This social context and constellation in which design methods are being used is important, since it has been shown that when it comes to empathy in design processes, the social situation is more important than the individual inclination to be empathic (Chang-Arana et al., 2020). Yet this perspective has received little attention in research on human-computer interaction, although there is extensive social psychology research showing that the circumstances, e.g., who is in my design team, predict a person's behavior better than their trait characteristics, e.g., being more or less empathic (Ross and Nisbett, 2011).

The dynamics within the development team then greatly influence empathic processes. We found an example of this

in one of our studies, in which we had originally set out to investigate which aspects of personas are most suitable to strengthen empathy with users (Haag and Marsden, 2018). Yet what we found was that social psychological processes were more important than characteristics of the persona: In the interaction with the personas, the team members were preoccupied with conveying their own competence to their fellow team members. The personas were ignored or dealt with superficially, e.g., looking only at their age and stating that the persona "will struggle with the new computers [. . .] at the age of 67." In the team setting dominated by a male majority, the interaction with the personas was neglected and much of the team members' cognitive resources were occupied with self-presentation. Left to their own devices on how to deal with the personas, the team started a discussion after a short glance at the personas. They did not empathize or identify with the personas—rather, they tried to enhance their ingroup identity by differentiating themselves from the personas. The team members compared the personas' characteristics and competencies to their own, focusing on creating a consensus regarding the view of the personas as the "other," i.e., differentiating "us" as the development team from "them" as the users. The personas thus triggered self-presentation, impression management, status orientation, and groupthink. These group-dynamic processes used much of the team members' resources; they prevented empathic processes since the team members barely engaged with the personas, which in turn lead to stereotyping the personas and to paternalistic behavior toward personas who were not seen as competent.

Our study illustrates that social situations like a team meeting are cognitively and emotionally demanding. Using personas in a team meeting therefore can distract from the identificatory effort needed for empathy. This is especially the case when there are strong group dynamics, e.g., when team members feel they need to look good compared to the rest of the team. Inducing empathy with personas therefore needs a conscious allocation of cognitive and emotional resources to the personas and the empathy process. The members of the design team need time by themselves to give full attention to the personas that they are supposed to empathize with—without distractions and without the influence of the team. Otherwise, group dynamic processes and interactions between team members may prevent empathy—and this shortfall of empathy might even be triggered by tools that were supposed to induce empathy.

Conclusion

Overall, the increased importance of empathy in the development of technical artifacts is to be welcomed. Often, however, the emotional identification that is characteristic of empathy does not really take place. As we outlined above, this might be due to,

- the fact that empathy is a gendered construct,
- the failure of the idea of using shortcuts to operationalize empathy,
- the neglect of the team situation that methods for empathy are being used in.

Using the design tool "personas" as an example, we showed that these three issues are intimately intertwined. Going forward, all three issues need to be addressed if we do not want to lead empathy ad absurdum using empathy tools.

Regarding empathy as a gendered construct, we argued that care needs to be taken with regard to dubious gendered assumptions regarding the distribution of empathy: If women are expected to be more empathic than men, then men's empathy gets recognized—while for women, only its absence will be noted. This further exacerbates the situation for women in tech, where stereotypes and discrimination make it hard for women to secure acknowledgment of their performance. Therefore, the feminization of empathy needs to be recognized as a result of patriarchal structures and should be avoided in any talk about upgrading the importance of empathy in design. Whether in scientific research in academia or in the practical user research in tech companies, we need to push forward empathy's fair re-destribution between the genders.

Regarding the failure of the idea of using shortcuts for empathy, we pointed out that the availability of methods and tools for empathy that seem easy to use and automatically lead to empathy is misleading. In fact, the idea that empathy can easily be induced in the design process through tools like empathy maps or personas can also be seen as a reflection of the feminization of empathy: While qualities with a masculine connotation like technical competence are supposedly difficult and hard to learn, qualities with a feminine connotation like empathy are seen as easier to learn. Yet empathy cannot be induced easily. The assumption that it can be is by itself fueled by gender stereotypes. Due to the devaluation that is inherent in feminization, it leads to the creation of tools that imply that without much effort, these tools can produce the desired empathy. Therefore, any attempt to induce empathy in the design process needs to acknowledge the complexity of the concept and cater to the broad commitment and the effortful investment that is needed both from the individuals involved and from the organization responsible for the practices employed in any user-centered design process. Because not only is this idea of easy empathy through tools misguided—the unreflected use of these tools actually perpetuates gender bias. These methods bear the risk of creating the illusion that an intensive engagement with others is taking place, while the application of the method once again excludes the people that are supposed to be empathically included.

Regarding the neglect of the team situation, we showed how social psychological processes can defeat the purpose of using design tools like personas and how group dynamics—of, as is, primarily male-dominated design teams—can hinder empathy: All too often, the need to belong to the team and to self-present in a team-compatible way determines which people and groups are worth the effort of empathizing with—and which ones are not. Therefore, the primacy of the circumstances over a person's inclination to be empathic and the cognitive load the team situation exerts needs to be acknowledged. Empathic processes take place within the individual person, therefore, empathy is a lonely business and any attempt to integrate it into the design process needs to offer time for the individuals to exert this effort with as little other demands on their cognitive and emotional resources as possible. So the team members need to individually empathize before interaction with the other team members—and the team situation needs professional facilitation to ensure that group dynamics do not run loose and impact the decision-making of (any, but for our purpose particularly male-dominated) design teams. Otherwise, empathy inevitably produces exclusions at the moment of supposed inclusion—a fact that usually remains unreflected in retrospectives and reflection meetings of development teams.

So while having a deep understanding of possible users seems indispensible in the design process and empathy might help in gaining this understanding, it is open for discussion whether some of the tools meant to promote empathy can actually deliver on their promise. In this way, the talk of empathy becomes a surrogate for what really should be talked about or whose voice should be heard, a surrogate for an intensive and quite effortful form of engagement with the other, the unknown, and the strange, that would deserve to be called empathic.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

Both authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Conflict of interest

Author AW was employed by Circle2.

The remaining author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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