Beyond empathy: how curiosity promotes to greater care

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Abstract

Empathy is widely revered as an essential mindset among designers. While beneficial to design practice, empathy has its problems. Consider studies that show: (1) We easily confuse and conflate empathy, sympathy, and compassion. The differences between these capacities are critically important. (2) Empathic resonance in the brain is highly biased. We find it hard to empathize with people unlike ourselves. (3) Having too much empathy may also be problematic and can be weaponized by bad actors. (4) We feel empathy only for humans and some animals — not for objects, spaces, places, or our planet.

If we can empathize with humans and only in limited ways, perhaps designers could benefit from an assemblage of emotive capacities beyond just empathy. This paper will trace the "edges of empathy" and argue that designers should cultivate two additional emotive capacities that complement empathy: curiosity and care. Because care is a linguistic ancestor to the English word curiosity, the paper will briefly trace the etymological roots of curiosity. It will argue that care and curiosity are inextricable: developing one can foster the other. The paper concludes that, unlike empathy, care and curiosity broadly apply to people, objects, places, systems, and ecologies situated around that which we build.

Author keywords

Curiosity; empathy; interaction design; designing for care

Introduction

Empathy is widely revered as an essential mindset for design practice. For good reasons: Empathy helps us take the perspective of other people (Maibom, 2022), identify with them (Spaulding, 2019), understand their emotional states, and build rapport (Maibom, 2019). Philosophers propose it as the basis for morality (Kauppinen, 2019) and one way we can actualize care and concern (Zaki, 2020). Design practitioners and academics have placed increasing importance on empathy. Cross (1982) listed empathy as one of the values that distinguished design from the long-established cultures of the sciences and humanities. IDEO and the Stanford d.school helped popularize design thinking as a way for organizations to scale design practices, beginning with an empathize phase. Dave Gray's original (May, 2021) and updated Empathy Map (2017) provide a template to capture empathy in design research.

While valuable to design practice, empathy has its problems. Having empathy does not necessarily make us better people. Empathy is not necessarily bad, but neither is it all good. Empathy has come under scrutiny recently. Psychologists, cognitive scientists, and philosophers are re-examining its place as a singular force for only good.

Designers are too. Heylighen and Dong's academic article in *Design Studies* (2019) stressed the importance of recognizing the limits of knowing the experiences of others. Anthropologist and design researcher Sekai Farai (2020) addressed design practitioners in her User Experience Researchers Conference (UXRC) talk by saying, "I'm here to call bullshit on empathy in user experience with love," noting that "there is less empathy in user research today than there should be." Even renowned, influential design icons are questioning the limits of empathy. Donald Norman's *Why I Don't Believe in Empathetic Design* (2019) challenges the notion that empathy can make us think we can comprehend how others feel and what they think.

In this paper, we will define empathy and explain its importance. We will then identify sixteen "edges" or limitations of empathy that extend from the individual to those with similar characteristics, those with dissimilar characteristics, and society. We will investigate how these limitations can be enhanced by two additional emotive capacities: care and curiosity. In short, this paper will address the question: Is empathy enough?

What is Empathy?

Coined over 100 years ago by Edward B. Titchener, the term "empathy" is used to refer to a range of feelings and phenomena. It is worth noting that there is no consensus on the term's definition in psychology and neuroscience. Cuff et al. (2014) list 43 discrete definitions of empathy. This definition diversity is not necessarily a problem, but a mismatch between the way empathy is researched and the way it is being practiced may lead to overall confusion about its efficacy. All definitions of empathy confirm the idea that it is other-oriented. Designers colloquially use the phrase "stepping into another's shoes" to describe it. This paper uses Goleman and Ekman's definition of empathy (2008), which delineates three types of empathy. Other researchers have adopted the Goleman and Ekman triadic model, such as Zaki (2020), who uses similar terms, as shown in Table 1.

Table 1. Three kinds of empathy

Goleman and Ekman (2008)	Zaki (2020)	Definition
Cognitive empathy	Cognitive empathy	Identifying what others feel and what they might be thinking
Affective empathy	Emotional empathy	Physically feeling what others feel
Compassionate empathy	Empathic concern	Understanding the situation and feeling of others and are moved to assist

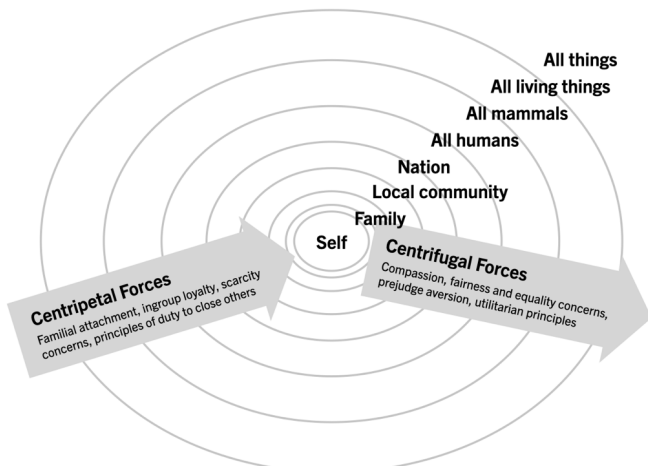| 1. Self	2. Similars	3. Dissimilars	4. Society
1.1 Easily confused	2.1 Spotlight effect	3.1 Side-taking	4.1 Human-centered
1.2 Negative consequences	2.2 Snapshot effect	3.2 Filtered-empathy	4.2 Fuels division
1.3 Manipulation	2.3 Empathic bias	3.3 Limitations of imagination	4.3 Culturally embedded
1.4 Unreliable narrators		3.4 Double-empathy problem	
1.5 The Empathy Trap			
1.6 Illusion of understanding			

Figure 2. Sixteen limitations of empathy

Other kinds of empathies outside of these three may exist. Literature on autism, for example, describe *motor empathy*, where we mirror facial expressions, body language or speech of another (Silvertant, 2018). Depending on the situation, our past experiences, how well we know the person we are directing our empathy towards, and other factors, our empathy can take on different forms. Cognitive empathy, affective empathy, compassionate empathy, or some combination of all three are possible. This makes empathy elastic, as our capacity to empathize can stretch to any of these components.

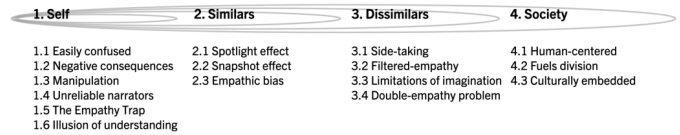## The Influence of Proximity to Self on Empathy

Empathy is widely accepted as the basis of morality and moral values (Hoffman, 2001). Peter Singer (1981) introduced the concept of the moral circle to explore differences in moral judgments. The moral circle has the self at its center, with progressively larger circles for family, tribe, etc. Graham et al. (2017) adapted Singer's circle to propose the concept of centripetal and centrifugal forces within this moral circle (Figure 1).

Centrifugal Force Empathy pushes attention and concern away from the self. Centrifugal forces (centrum + fugio = "center-fleeing") push from the center of the moral circle (family, community) to the outermost circles (all humans, all living things). Graham et al. describe this force as in conflict with another powerful force in the moral circle, a centripetal (centrum + petere = "center-seeking") pulling inward to the concern of family and self.

We adapt Graham et al.'s forces on Singer's circle (Figure 2), simplifying their effects into four main categories: the self at the center, people familiar or similar to us (our in-group), oth-

ers (out-group), and society. These concentric circles influence how we respond to the people we design for and with.

We categorize these sixteen limitations of empathy into four categories. If mapped, they would form the boundaries of the empathy territory. This is not an exhaustive list and some items may fit into multiple categories. Many are situation dependent. Some limitations have a disproportionate impact, depending on the individual, situation, or context. How each limitation manifests is determined by the designer, as well as the processes and collective design decisions made. Where possible, attention is given to how each limitation is relevant to designers. More research is needed to better understand the effects and externalities of these limitations in design practice.

Limitations of Empathy Concerning the Self

Zaki (2020) argues that, rather than being an immutable and unchanging trait, empathy is a skill that can be improved over time. Empathy can thus be conceived of as a capacity, something that can be filled, expanded, or diminished. The following six items are a function of the designer's emotive capacity.

1.1 Empathy is often confused with other emotions. It can be challenging to define what empathy entails. The popularization of design thinking methods has caused empathy to become more elastic, taking on connotations and meanings beyond its scope. Designer Jason Mesut has created a map (2018) of concepts that are often mistaken for empathy, such as sympathy, pity, compassion, and ignorance. This map is a tool to explore which emotion should be expressed to whom (users, colleagues, stakeholders, the wider system). Mesut also points out that designers focus on empathizing with users while neglecting other actors and stakeholders. One could argue that this confusion has little effect, if a general effort is made to understand the emotions of others. However, it is important to note that understanding the feelings of others (sympathy) is quite different from being aware but detached from another's thoughts and feelings (pity) and leads to different understandings and insights.

1.2 Empathy can have negative consequences for those who experience it, such as burnout. Maslach and Jackson (1981) defined *burnout* as a psychological syndrome involving physical depletion, feelings of helplessness, negative self-concept, and negative attitudes towards work, life, and others. The Maslach Burnout Inventory (MBI) is considered the "gold standard" for measuring burnout in empirical research (Bradham, 2008; Lee & Ashforth, 1990) and has been applied to settings beyond healthcare. Burnout can significantly reduce the quality of care in professional medical settings. Likewise, it may make designers less likely to show concern in certain situations. However, more academic research is needed into the relationship between empathy and burnout for design professionals.

All things
All living things
All mammals
All humans
Nation
Local community
Family
Self

Centripetal Forces
Familial attachment, ingroup loyalty, scarcity concerns, principles of duty to close others

Centrifugal Forces
Compassion, fairness and equality concerns, prejudge aversion, utilitarian principles

Figure 1. Graham et al.'s (2017) notion of centripetal and centrifugal forces in the moral circle

1.3 Exercising empathy exposes us to manipulation. Breithaupt (2012) notes that in the legal system, empathy can cloud judgment and cause jury members to side not with the morally correct party but with the one more adept at eliciting empathy. Similarly, designers who are not knowledgeable about the wider contexts of their products or services may be unaware of similar manipulative forces. Managers, stakeholders, consumers, or others involved in the design process may exert some form of manipulation through empathy. It is worth noting that designers may, conversely, use empathy to manipulate others.

1.4 We are unreliable narrators of our own situations. Norman (2019) strikes at the idea that empathy can lead us to believe that we are in another person's head and can understand how people feel and what they think. This is a fallacy: we often do not know or understand what we are feeling or why, let alone what those around us might be feeling. The narratives we create often portray our actions in a favorable light and can thus be inaccurate or incomplete.

1.5 Empathy can trap us in the emotions of others. According to Stern and Divecha (2017), when trying to understand the perspective of others, it is important to maintain a balance between our own emotions and those of the other person. Without this balance, we may feel like we are being held hostage by the emotions of others. They refer to this phenomenon as the "Empathy Trap", which works like a contagion, causing us to become overly invested in the feelings of others and neglecting our own. This is often seen in close personal relationships (such as between partners or spouses), but it can also occur in work relationships or during design research.

1.6 Recognizing the emotions of others may lead us to believe we understand when, we do not. This is one of the most dangerous limitations of empathy. Designers cannot be sure that they are feeling the same emotion as those with whom they empathize or that they understand or experience the emotion the same way. Even if designers correctly identify the emotions of others, they may not interpret the meaning, context, or implications accurately. Saying or thinking "I understand" too quickly can prevent further questioning in design research. Approaching the situation with the mindset of "I don't understand" or "I don't fully understand" can lead to a more thorough exploration.

Limitations of Empathy Concerning Similars

We tend to show the most empathy to those who are similar to us or familiar. This can lead to a series of biases that we may not be aware of on a conscious level.

2.1 The spotlight nature of empathy narrows, rather than widens, our view. Bloom (2016) describes empathy as a spotlight that allows us to focus on certain people in the present. This can be beneficial in fostering care for those under the spotlight, but it can also lead to insensitivity towards those outside of it. This myopic nature of empathy can have long-term consequences, such as designers neglecting certain types of user groups, stakeholders, or agents that are unlike themselves.

2.2 The snapshot effect of empathy locks people into a time and place. Bloom's spotlight only concerns the present moment. Brown and Kulik (1977) introduced the term "flashbulb memory," which describes highly vivid or salient moments that are "snapshotted" in time. This effect can be applied to how we experience people. Designers often create personas, journey maps, and other artifacts that snapshot individuals without also identifying ways that people will naturally change over time. Empathy has a limited lifespan.

2.3 Empathic reasoning is biased. We are not psychologically wired to feel the same way toward a stranger as we do toward someone we love (Scarry, 1998). We choose whom we want to show empathy toward, which reflects our biases. It is difficult for us to empathize with people who are very different from us. We tend to feel more empathy towards people who are attractive than those who are not. For those who disgust us, we generally feel no empathy at all. Designers may unconsciously select individuals who are similar to them to show empathy towards or implicitly extend empathy to those most like them. This phenomenon is more widely studied in the legal system than it is in design.

Limitations of Empathy Concerning Dissimilars

Empathy's weakest point is when it is extended to those too much unlike us. Because the products, services, and systems designers influence may have large or worldwide audiences (in the case of social media systems or applications), this can cause deleterious effects on users.

3.1 We are likely to take sides when observing conflict between two or more people. Unlike psychologists and counselors, who have received extensive training in remaining neutral and objective, most designers have not had this kind of training. Nevertheless, we often extend empathy to one side in a conflict to justify our own actions. Ethnographic research has demonstrated that taking a first-person-like perspective on other people's behavior is rarely seen as beneficial, as it can be prone to errors and can be used to both harm and help (Hollan, 2019).

3.2 Empathy can be filtered through mediators or helpers. Human beings often help each other in situations of need, and empathy is often cited as the likely motivator for this behavior (Brown, 2009). Breithaupt (2017) suggests an alternative explanation. Instead of direct empathy with the person in need, another mental act may motivate behavior: identification with the (real or imaginary) helper. Through identification (that is, seeing oneself as oneself in the situation of the other), the empathizer participates in the positive aura of the helper. Breithaupt refers to this form of empathy as filtered, which is indirect and mediated.

However, filtered empathy has its drawbacks. Additionally, when filtered empathy is used, the target of empathy only matters insofar as they fit the image of the filter. In the case of humanitarian aid, the target of empathy only matters as the victim, which can lead to a tendency to maintain or prolong the victim status.

3.3 Our imagination of those dissimilar to us is extremely limited. We have tremendous difficulty imagining and understanding the reasons and rationales behind the behaviors of those who are too dissimilar to us. Scarry (1998) argues that human imagination is relatively weak as a tool to offset our

immediate perceptions. We may instead rely on dangerous stereotypes or facile explanations without truly understanding individuals.

3.4 Empathy is often manifested differently between neurotypical and neurodiverse individuals. Milton's "double empathy problem" (2012) suggests that a mismatch between two people can lead to faulty communication. Milton argues that neurotypicals demonstrate empathy in ways that are distinct from those of neurodiverse individuals, such as those who identify on the autism spectrum. This disconnect can occur at many levels, from conversation styles to how people view the world. The greater the disconnect, the more difficulty the two will have interacting, leading to misunderstandings of reciprocity and mutuality.

For example, a study by Sheppard et al. (2016) reveals that non-autistic individuals struggle to accurately interpret the facial expressions of autistic people. Non-autistic individuals show difficulty in deciphering the mental states of those on the spectrum (Sasson, 2017). Empathy, as practiced by Design Thinking as popularized by IDEO, is generally presented as neurotypical.

Limitations of Empathy Concerning Society

4.1 Empathy tends to be human-centered. Gregory Currie (2011) makes the case that we may be able to empathize with objects, but his argument centers primarily around aesthetics, works of arts intended to elicit emotional response. We do not generally feel emotions for objects or mentally simulate emotions in our minds for human-made objects. For example, we do not, as a general rule, apologize to the chair before we sit in it.

Neither do we generally empathize with nature. We may be more likely to empathize with animals but in unequal ways. We have empathy for animals likely to be pets, such as dogs, cats, and birds. We have little to no empathy or concern for animals we consider nuisances, unwelcome predators, or spreaders of diseases.

In the Anthropocene, where human activity has a profound negative effect on the environment (Lewis & Maslin, 2015), empathy for the environment may make us more likely to consider the effects of collective human action upon it. Designers who create products do not often consider the effect of their products on the environment or understand how their creation may destabilize ecosystems.

4.2 In-group empathy can fuel division. While empathy creates connections with others, it can also fuel division. Bloom (2016) cites the Israel-Palestine conflict to show how individuals feel deeply about crimes done toward them or their families. Breithaupt (2018) notes that terrorists may feel such strong empathy for people in a conflict that they act violently against the other side.

Adam Smith's words, as cited by Bloom, are particularly poignant: "When we see one man oppressed or injured by another, the sympathy which we feel with the distress of the sufferer seems to serve only to animate our fellow-feeling with his resentment against the offender. We are rejoiced to see him attack his adversary in his turn, and are eager and ready to assist him." This encourages us to protect our in-group.

4.3 Empathy is culturally embedded. Empathy is a capacity that is shaped by and responsive to the cultural, moral, and political contexts in which it is embedded. Hollan (2019) points out that while recent ethnographic research suggests that many people around the world share concepts or terminology that may overlap with the Western notion of empathy, far fewer have ones that are identical to it. The vocabulary and conceptualization of empathic-like processes vary considerably through space and time. There seem to be many places in the world, for example in the Pacific region (Hollan & Throop, 2011a), where empathic-like sentiments shade much more closely, both semantically and behaviorally, to what English speakers would refer to as love, compassion, sympathy, concern, pity, or some hyphenated combination of these terms. In the eastern Indonesian society of Toraja, terms suggesting empathic-like awareness but translating more literally into English as "love-compassion-pity" often imply a strong sense of identification or merger with the subject of attention, such that one feels compelled to reach out and help, as if one had no other choice (Hollan, 2011).

The limitations of empathy identified above underscore the need for diverse design teams with varied backgrounds, ages, experiences, and perspectives.

Conclusion: The Case for Care and Curiosity

If we can empathize with only humans, and as demonstrated above, only in limited or biased ways, perhaps designers could benefit from an assemblage of emotive capacities beyond just empathy. Two of those emotive capacities are curiosity and care. Mayeroff (1971) defines caring as acting on empathy. Rodgers and Bremner (2016) identify care as an important part of the concept of the design discipline that points us toward larger contexts and concerns: "care refers to designing with the macro and micro social, technological, economic, environmental and political effects of design decision-making well in mind." Like empathy, care is other-centered but when used in design practice, care can attune us to the effects of design in the way we live.

Stepping into the shoes of others and understanding them requires an abiding curiosity about what life may be like outside of our own experiences. Voss (2013) describes curiosity as simply motivation to explore. Empathy can have the effect of shutting off question-asking. The explorative nature of curiosity opens us up to question-asking and necessitates further exploration.

The English word curiosity traces roots from Latin (*cūra*, meaning care, concern, or a means of healing) to early medieval Latin (*cūriōsus*, meaning full of care or pains, careful, assiduous) through Italian, French, and Middle English before entering our modern language ("Curiosity", n.d.). That curiosity is linguistically rooted in care has profound implications. It can be argued that demonstrating genuine curiosity toward someone is also a form of demonstrating that care. Both care and curiosity widen the circle of understanding in ways that empathy cannot. Empathy is primarily centered around humans (see Limitation 4.1 above). Wakkary (2021) argues for a rethinking of design that displaces humans at the center of thought and action.

Curiosity about the effects of what we design—not just to users, stakeholders, or other humans, but also to the environment, planet, and ecological systems—can also be a way of extending care beyond humans. Operationalizing curiosi-

ty in design requires designers to ask more questions, leave time to explore the answers, and engage more frequently in reflection. The cross-disciplinary, emerging field of curiosity studies, pioneered by Perry Zurn and Arjun Shankar (2020), may find contributions from designers valuable.

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