Empathy 2.0

What it means to be empathetic in a diverse and digital world

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Caroline Bollen

Simon Stevin Series in the Ethics of Technology

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What it means to be empathetic in a diverse and digital world

Dissertation

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by

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Acknowledgements

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1. Introduction

Technological development is happening at a fast pace in many places and areas. While some technologies exist in a very specific niche that most people never encounter, some technologies drastically shape our collective lifestyles, norms, or even values. They shape, I would say, what it means to be a human in this place and time. The technologies of interest to this dissertation are those that mediate how we communicate with each other. I wake up, and I wish my partner a good morning by sending him a text message, often accompanied by a GIF of a cute animal, to start the day in a positive mood. I join my supervisor in her kitchen, and she me in my living room as we discuss a new chapter of this dissertation via Teams. As I am editing the text later, a friend sends a picture of a crafts project in our group chat, which reminds me to ask her personally, in a private message, how the phone call with her doctor went. After work, I watch a video of an influencer who hadn't posted for quite a while, and I was genuinely a little worried for her. In the video, she tells me, and the rest of her subscribers, about what was on her mind. I leave a like to express support. I tell my partner about it as he sits beside me on the couch.

This story describes various ways in which our social lives can be technology-mediated. Describing and understanding the changes these technologies bring about is one thing; asking whether these changes are desirable is another. These newfound ways of being social bring about new ethical concerns as well as opportunities. Ideally, technologies make our lives, our society, and our world better. There are various initiatives in research and innovation practice to not only reflect on this but also constructively provide solutions to design and implement technologies in alignment with certain values, such as safety, sustainability, or health. As the title of this dissertation suggests, I will engage particularly with what technologically mediated communication means for *empathy*.

In order to implement certain values in technological design, we need to have a clear understanding of what these values are, what they mean, why they are important, and how they can be then operationalised into practice. If technologies ask for reconsideration of these normative concepts, such as empathy, this is an important challenge to be taken up first. Applying accounts of certain concepts that have been developed in the past to a new sociotechnical phenomenon without critically reflecting on the concept first can lead to significant problems. Existing conceptual schemes may not suffice in understanding the challenges surrounding a technology, causing us to

overlook some dimensions. But also, existing problems and injustices in our conceptual schemes may persist or even be reinforced when designing our technologies in accordance with them. As will be discussed in detail in this dissertation, both risks are at play for the concept of *empathy*. That is why I will reconsider *empathy* as a normative concept to better fit the 21st century and its social and sociotechnical challenges.

1.1. Empathy and Communication Technologies

Communication technologies have a significant impact on our social lives and our ways of relating to one another. This raises questions on whether this impact is positive/desirable or not, whether certain technologies work along or against us in trying to live a Good Life, of which social relationships are an important part. Further questions are, then, how to design, implement, and use technologies in a better way. There are concerns, discussed both academically and colloquially, that the increasing role of communication technologies (CTs) in our social lives estranges rather than connects us and that the constant interconnectivity paradoxically leads to more individualism and loneliness. This dissertation focuses on a central concept within this discussion on CT's impact on sociality and relationality: empathy. Some questions that may come to mind are: (how) can a technologically mediated interaction or relationship be empathetic? Does the deep integration of CTs in our social lives support us or hold us back from developing and practising empathy or empathically relating to each other? Does it make our society less empathetic or more? What role do specific design choices in a CT play in its impact on empathy? Is face-to-face interaction or physical vicinity necessary for empathy? These are not questions this dissertation will answer directly. Instead, I will develop a framework for approaching them.

This would be a good moment to provide a concise definition of the concept that we could work with to approach these questions. However, defining empathy is tricky, which is exactly a motivation for the research in this dissertation. The meaning of the concept is far from agreed upon, and there are important ethical concerns related to defining empathy. This is why I will not provide any definition just yet. Nevertheless, as *empathy* is not a particularly uncommon, difficult, or jargon term, most people probably already have some sense of what this concept refers to. To get a casual sketch of what *empathy* is colloquially associated with, Google Trends shows the following most popular topics in searches related to empathy in the past five years worldwide. I grouped them thematically first and then organised them in order of popularity:

[meaning], [definition], [synonym],
[sympathy], [pity], [difference]
[lack of empathy],
[emotion], [feeling],
[cognition], [thought],
[skill], [communication], [leadership],
[important]
[self], [other],

These keywords paint a picture of what kind of concept empathy is in relation to other concepts, but at the same time, already here some questions come to mind. Is it a feeling or a thought? Is it a skill? Is it important? What does it mean to lack it? How is it related to the self or the other? How does it differ from or relate to other concepts, such as sympathy? Interestingly, this crude sketch of associations within a search engine already points to various key disagreements in conceptualisations of empathy, which will be extensively discussed in a systematic review in Chapter 2. Notably, empathy is typically used normatively. To be called empathetic is considered a compliment, and unempathetic is an insult. And if a certain technology was found to undermine or diminish empathy, this would typically be considered undesirable. However, various definitions of empathy that are not associated with morality at all are in use in academia.

The ambiguity and disagreement about what empathy is make it unclear whether and how we can actually use empathy as a moral concept. This conceptual unclarity confuses debates and makes it difficult to meaningfully engage with the concept together and across disciplines. At the same time, there seems to be a need to explore the relationship between communication technologies and empathy in light of the concerns raised above. This is a problem this dissertation aims to address by, among other things, developing an account of empathy that we can use in the ethics of communication technologies.

1.2. Empathy and neurodiversity

The confusion on how to exactly conceptualise empathy is not only a challenge in the ethics of modern communication technologies. The fourth most increasingly searched-for question related to empathy on Google (+2040% in 5 years worldwide) is "Do autistic people have empathy?". Autism is associated with diminished or even

lack of empathy, which is a widely held view both inside and outside academia. In recent years, this narrative has been increasingly contested by autistic people sharing their experiences of empathy. Communication technologies, such as online forums, blogs, and social media communities, have played a significant role in providing platforms for these stories to be told and heard (Welch, Cameron et al. 2020). This technological facilitation of sharing first-hand experiences, stories, perspectives, and knowledge has been particularly important because these experiences do often not have a place in academic research on empathy nor in mainstream societal debates or media (Stenning 2020). I refer to this problem as *the neurotypical gatekeeping* of empathy, and this will be explored in depth in Chapter 3. This longstanding exclusion and invalidation of autistic empathic experiences upholds the narrative that autistic people have inferior empathy, and combined with the widely held normative connotation of the term, this supports a negative outlook on autism and autistic people.

The dominant description of autism, in line with the DSM-5, is that autism is a neurodevelopmental disorder characterised by social and communicative challenges, repetitive behaviour, and hyper- or hypo-sensitivity to sensory information. The DSM is a diagnostic tool for mental disorders. In principle, a proper diagnosis could give direction to a helpful support plan (for example, therapy, medication, coaching, etc.) for the benefit of the well-being of the individual (and, by extension, their surroundings). However, there are significant critiques directed at both the way mental disorders are conceptualised and diagnosed and at the mental healthcare system for its inadequacy, inefficiency, and even injustice in dealing with these (supposed) disorders (Tsou 2016).

A lot of this debate is out of scope for this dissertation, but one aspect is particularly relevant: what does it mean for autism to be considered a disorder? This question is not only relevant for autistic people but is one asked throughout disability literature. What is (un)healthy? What is (ab)normal? And what does it imply to be "unhealthy" or "abnormal"? A simple and pragmatic approach to disorder and disability is that it involves two things: a deviation from a "typical" mind or body *and* a sense of suffering or diminished well-being. An important question to ask, however, is what the relationship is between the deviation and the suffering. Two contrasting approaches to this are the medical and social models of disability. According to the medical model, the deviation causes suffering – so to improve well-being, the deviation needs to be addressed by treatment or intervention. Consider, for example, a spinal deformation that causes nerve pain, where the pain could be removed or reduced by surgical intervention. According to the social model of disability, the suffering is instead (or

partly) caused by societal factors, such as stigma, exclusion, bullying, and other forms of interpersonal or systemic ableism.

The *neurodiversity* movement asks critical questions about the dominant medical model that is used to make sense of experiences with differences in neurocognitive makeup (for example, what is understood as autism, ADHD, ADD, bipolar disorder, and others). Adopting a reasoning closer to the social model by investigating in which ways neurodivergence is not accommodated in society drastically impacts how to approach interventions. If much suffering is caused by interpersonal and systemic ableism rather than the neurodivergence itself, intervention directed to these phenomena would be more adequate than individual therapy or medication (or a combination). For example, ABA therapies (Applied Behavioural Analysis) aim to instil "socially accepted behaviour" in autistic children – and these have been criticised for doing more harm than good. These therapies, especially versions that include violence (for example, the administration of electric shocks to de-incentivise or punish "undesirable" behaviour), are associated with a high risk of PTSD (Kupferstein 2018). This harm may be reason enough to question the ethics of these interventions, but the supposed benefits may also be reconsidered, namely, by challenging the narrow behavioural norms that favour neurotypicality and other societal factors that create an exclusive and inaccessible environment, causing root problems for undesirable behaviours such as tantrums. We can here see different stories at play of what autism and its place in our society are. Is autism a form of diversity, a way of being, that we as a society should better accommodate? Or is it an undesirable disorder that we should aim to treat or even eradicate (the latter a severely criticised, but not uncommon, view)? Or is it some combination of both?

This precarious ongoing debate provides a grim backdrop for my reflection on how to best understand empathy and how this relates to autism. Because empathy is colloquially, and also often academically, associated with *goodness* and *virtue*, a connection between autism and a lack of empathy supports the story in which autism is undesirable and associated with a *lack of virtue*. There are narratives that highlight other characteristics that autistic people excel in, for example, systemising skills, that could "make up" for diminished empathy with respect to *being a good person* or *a person beneficial to society* (Baron-Cohen 2002). However, such an approach still invalidates autistic empathetic experiences (and makes some debatable moral theoretical assumptions on human value and the interchangeability and commensurability of virtues). While it could be that some mental disorders are, in fact, associated with diminished empathy (or other virtues), first-person accounts of autistic empathy

provide reason to question whether this is truly the case for autism. Instead, as will be explored in the first chapters of this dissertation, there is a strong link between how empathy is conceptualised and operationalised in research and the academic and societal understanding of autistic empathy (or, better to say, lack thereof). This provides another motivation to reassess how to best conceptualise empathy, to not only better suit the current technosocial context but also to cast off the discriminatory tendencies in how the concept is understood and used.

1.3. Research questions

Because of these existing conceptual problems with empathy and related confusion on how to understand it in connection to communication technologies, it is unclear whether and how to use this concept for ethical reflection, guidance, and argumentation. Nevertheless, the concept *is* being used academically and colloquially to make sense of various social and technical phenomena in a normative manner – to express concern, appreciation, value, risks, etc. This mismatch is not without problems. The aim of this dissertation is to expose some of these problems and provide a solution: an account of empathy 2.0 – what it means to be empathetic in a digital and diverse world.

The research question and sub-questions are as follows:

Q **How should we understand empathy, as a normative concept, in a way that accounts for technologically mediated communication *and* in a way that is inclusive to autistic empathic experiences?**

- SQ1 How is empathy currently understood in autism research? How is it defined and measured?
- SQ2 What problems are occurring with existing dominant accounts of empathy, particularly (but not solely) with regards to autistic empathetic experiences?
- SQ3 Should empathy be considered a normative concept at all, and if so, in what way?
- SQ4 What role(s) can communication technologies play in empathy? How can we make sense of technologically mediated empathy?
- SQ5 How can empathy be used as a normative conceptual tool applied to communication technologies (assessment, evaluation, design, etc.)?

The main body of this dissertation is split into three parts. Part I, "Problems in defining empathy," will focus on SQ 1 and 2, Part II, "A proposal for empathy," on SQ 3, and Part III, "Empathy and communication technologies," on SQ 4 and 5. The conclusion will summarise these findings and formulate an answer to the main research question. Part I starts with an interdisciplinary systematic review of empathy definitions and methodological operationalisations as used in research on autism and empathy (Chapter 2). In this review, some issues come to the fore. Chapter 3 will explore these in-depth and introduce the phenomenon of *neurotypical gatekeeping* of empathy, arguing for the need to revise the concept of 'empathy' and why this revised concept needs to be a normative one. Part II starts with a sketch of such a revised account of empathy in Chapter 4, introducing the concepts of *proximism* and *distantism* and empathy as the balance between the two. In Chapter 5, I will expand on this proposal and make use of virtue theory to build a more detailed, in-depth account of *empathy 2.0*. This brings us to Part III, which explores how my account of empathy can be applied to communication technologies (CTs). Chapter 6 will dissect various ways in which empathy can be mediated by CTs and it will provide a framework that can be used to *evaluate and design CTs for empathy*. Chapter 7 applies this framework to a specific subset of CTs: Alternative and Augmentative Communication (AAC) technologies. These are assistive technologies designed for people whose daily communication needs are not met by the use of speech – which can be because of a variety of reasons or causes, one of them being autism. Here, various concepts, frameworks, and arguments developed throughout the previous chapters come together to demonstrate how they can be used in the ethics of technology, seeing *empathy 2.0* in action.

After this, I will provide some clarifications and additional reflections on the account developed in the main body of this dissertation in Chapter 8, Discussion. Here, I will also propose some directions for future research based on the findings of this work. Finally, Chapter 9, Conclusion, will summarise the main findings and formulate answers to the research questions.

1.4. Methodological approach

In this research, I make use of various different approaches and methodologies. This work primarily belongs to the research domain philosophy and ethics of technology. Yet, being trained interdisciplinarily, I am not committed to a particular school of thought or bound by disciplinary methodological norms. The research questions took centre stage, and the way I approached them was creatively built around what they

asked for. This reflects my general epistemological stance as a researcher: different disciplines and their associated methods and approaches can shed light on different aspects, angles, or levels of the complexity of the world – all of them contributing, none of them complete. I will shortly present the various methods I used throughout this dissertation, roughly divided into two categories: descriptive and normative.

Descriptive methods aim to help understand what the state of things is. The first method I used for this was to approach the question of how empathy is currently being understood and measured in relation to autism – for which I performed a systematic review. As argued by Polonioli (2017), literature review in academic philosophy tends to, compared to other disciplines, be more prone to some serious biases towards certain authors and certain schools of thought. He proposes that we could take inspiration from other disciplines, such as biomedical science, and their systematic review methodology. While this might not be needed or desirable for every research question, it was for the one I found most suitable for my aim: getting a representative overview of how empathy is used as a concept in autism research. The body of work I was engaging with was multidisciplinary – consisting of psychology, neuroscience, sociology, philosophy, ethics, pedagogy, disability studies, and more. The method is described in detail in chapter 2. Another method used to understand the "state of things" was of an empirical nature. For chapter 7, I conducted interviews with users of AAC technologies to gain insight into their lived experience of using these technologies and their perspectives on their relationship with the device, empathy, and societal inclusion. These insights were of essential value in understanding the actual impact and use of these technologies – at least, how this *can* be experienced. The details of this methodology will be described in the chapter itself.

Besides general analytic thinking, there are two categories of theoretical approaches I used as lenses to *make sense* of "the state of things." First, I used notions of technological mediation to understand the impact and meaning of technologies in a socio-technical system. Importantly, I did this on two levels: the relationship between an individual and a technology, and between society and a technology. I made use of Ihde (1990)'s model of human-technology relationships to explore technologically mediated empathy in Chapters 6 and 7. Second, I used a combination of approaches I will broadly categorise as *critical theories*, understood here as theories with a critical approach to societal structures, norms, and institutions and their underlying assumptions. These include the neurodiversity paradigm and social model of disability, the notion of epistemic injustice (which I will introduce in Chapter 3), and a general focus on inclusivity and social justice. The reason I put these critical theories

and notions under the descriptive approaches, too, is that they provide a perspective and understanding of the "state of things" as a product of its social, political, and historical context – how and why the "state of things" came to be. However, these approaches are undeniably normative too.

So, let's now proceed with the normative methods used in this dissertation - ways to argue what the state of things should be. Starting with critical theories, they provide both a perspective to make sense of the way things are, as well as arguments for where to go to unravel inequality and injustice. With an emphasis on structures of domination and oppression, they invite a critique of the state of things in the way they frame a description of it; an antidote to the naturalistic fallacy. Next, I engage with virtue ethics as a relevant moral theory in which, I argue in Chapter 5, empathy should be included. As there are quite various ways in which to conceptualise virtues and their place in moral theory, I explicate my understanding of them in Chapter 5. Starting with the general notion that a virtue is a "good characteristic," it needs to be clarified what it means for a virtue to be a characteristic a person can have and develop (Stichter 2007, Darr 2020), what it means for it to be a "good" one (Kallenberg 2011, Vallor 2020), and following, it's place in ethics as a moral concept. The latter brings me to the next normative approach used in this dissertation: my use of conceptual engineering. In this dissertation, I will engineer an account of empathy and argue why this one should be used instead of certain others. This implies a pragmatic and dynamic approach to what concepts are; namely, by asking questions like "What does concept X do?", "How is it used?" yet also "What *should* it do?" and "How *should* it be used?". In chapter 3, I highlight the power concepts can have in how they shape how we think, understand, and make sense of the world. While this is not in itself problematic by any means, and for many concepts, it is indeed not, this power can be (unintentionally) misused and have undesirable consequences. As I will argue, this is the case for empathy. Lastly, with technologies understood as part of human-technology relationships and/or sociotechnical systems descriptively, I take inspiration from Design for Values (Van den Hoven, Vermaas et al. 2015) and Value Sensitive Design (Friedman 1996) to approach evaluations and recommendations for the role of technological design towards supporting (instead of challenging) empathy. This means that I support the idea that values can be embedded (or not) in technological design. What this means for empathy in the design of communication technologies will be explored in Chapters 6 and 7.

1.5. Summaries of Chapters 2-7

Here, I will provide a more detailed description of what will happen in each chapter in the main body of this dissertation.

1.5.1. PART I: Problems in defining empathy

Chapter 2: *Defining and measuring empathy: a systematic review of the meaning of empathy in autism research*

Empathy is an often researched but highly ambiguous concept. This makes research on empathy prone to miscommunication and misinterpretation. Careful reflection on what is meant by empathy in a certain context is essential. As the scope of the variety of possible meanings of empathy one could encounter is vast, such reflection would benefit from a guide that maps out this terrain of conceptual confusion. To this end, this chapter maps out the diversity of meanings assigned to empathy within the scope of autism research. The autism context is of particular relevance as autism is often linked to empathy in research, and crucially, how one understands empathy shapes theories of autism as well as the societal perception of autism. I conducted an interdisciplinary literature search to collect different conceptualisations of empathy used in autism research. I found that in 111 articles, 31 unique definitions of empathy were used. This diversity can be accounted for by a list of 12 dimensions along which the meaning of empathy can diverge, found in this analysis. These dimensions pinpoint which aspects of empathy require attention and reflection when engaging with empathy in research. These can be used as a practical framework to reflect on empathy in the design and documentation of research, defending methodological decisions, and interpreting the work of others. Furthermore, this chapter discusses various, and some worrisome, implications for findings and theories in autism research.

Chapter 3: *The need to revise the concept of empathy*

In the previous chapter, I identified several problematic trends in how empathy is understood and measured. In Chapter 3, I will argue why these call for a revision of the concept of empathy. Narrow assumptions on the relationship between experiences and expressions have made the concept exclusive to those who are perceived as neurotypical. In several ways, this has biased our knowledge of empathy, especially regarding autism. The operationalisations of empathy in empirical studies uphold a narrow conceptualisation of empathy that almost a priori excludes the possibility of

autistic empathetic experiences. This use of the concept of empathy not only invalidates autistic empathy but also sustains a harmful and stigmatising narrative of autism. *Empathy* is not strictly an academic concept, and its colloquial understanding often differs from its meaning in an academic context. Namely, the concept is usually associated with virtue. In this chapter, I expand on what I introduce as the *neurotypical gatekeeping* of empathy as a matter of epistemic injustice and argue why and how neurodiversity calls for a reconceptualisation of empathy.

1.5.2. PART II: A proposal for empathy

Chapter 4: *Towards a clear and fair conceptualisation of empathy*

In Chapter 3, I argued that the *neurotypical gatekeeping* of empathy requires a reconsideration of how we understand the concept and develop a clear and fair notion of empathy. In this chapter, I will build a proposal to do so. I argue that we need to settle the dispute on empathy and morality by accepting the value associated with empathy in society and using an anti-discriminatory normative conceptualisation accordingly, which would, in turn, resolve the dispute on conceptual specifics. I propose to understand empathy as appropriately attending to experiential differences and similarities between the self and other. This can be understood as a balance between what I term *proximism* and *distantism*. Proximism refers to disregarding experiential differences by projecting one's own experiences on the other and/or appropriating the other's experiences. Contrastingly, distantism refers to the overestimation of experiential differences, overlooking what is shared between oneself and the other. I will clarify my proposal in relation to other notions of empathy by discussing its position on different dimensions of current debates on the concept of empathy that I found in Chapter 2. Finally, I will discuss some conceptual and methodological implications of my proposal and its application to autism.

Chapter 5: *Conceptualising empathy as a virtue*

Empathy is often considered to be something good. It is also something we ascribe to persons, to character. However, whether such a use of the term is justified and meaningful depends on how one conceptualises empathy, and this is far from agreed upon. In this chapter, I set out a detailed account of empathy as a virtue. This conceptualisation of empathy, I argue, justifies its normative use and allows us to better communicate what we mean with empathy and use it for moral evaluation, inspiration, education, and argumentation. In short, empathy is understood here as appropriately attending to experiential differences and similarities between the self

and other, balancing between the vices of proximism and distantism. In the chapter, I explore what it exactly means for empathy to be a virtue and how to evaluate, analyse, and reflect on empathy. I argue that empathy enables us to navigate our intersubjective lives, an essential part of the Good Life that is currently destabilised by communication technologies and other societal changes. This makes empathy a particularly important virtue to reflect upon in the present. Understanding empathy as a virtue has several benefits. It has a moral theoretical foundation that can justify its use as a normative concept and the power the concept currently already holds; it allows for consideration of the social context in what it means to be empathetic, it offers a method to reflect on new technologies and societal changes, and it provides a constructive approach for empathy development and moral progress.

1.5.3. PART III: Empathy and communication technologies

Chapter 6: *Technology mediated empathy: how communication technologies change both the players and the game, and what to do about it*

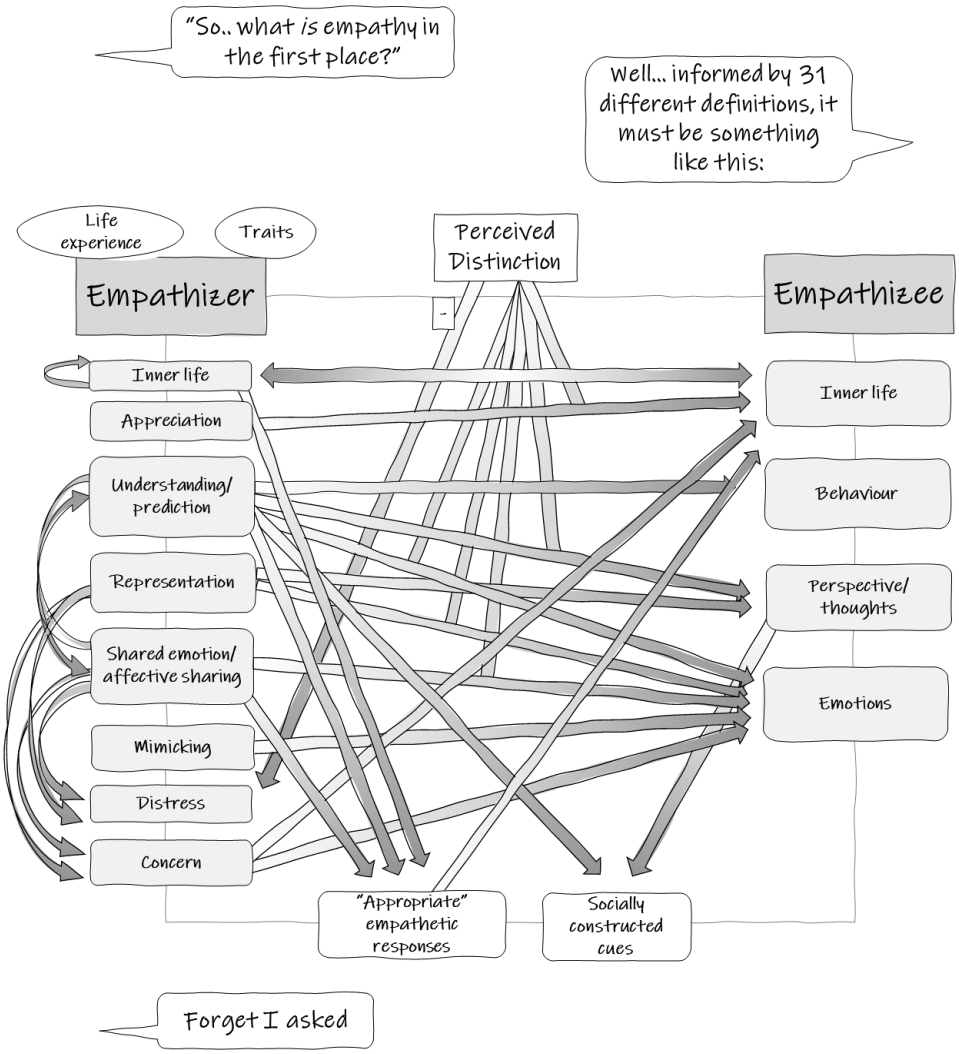
There is an interest in the impact of the increasing role of technologies in our social lives on empathy. However, in order to understand whether and how communication technologies (CTs) affect empathy, we first need a clearer grasp of how to best understand empathy and how it could be mediated by technology. A critical reconsideration of the concept as referring to a phenomenon in a social environment that is more and more shaped by CTs is needed, especially if we want to use the concept to evaluate technologies and their impact in terms of desirability and guidance to shape our future. I argue that we need to understand empathy explicitly as a moral concept, as well as contextually situated, relational, and diverse. Therefore, in this chapter, I use the virtue approach to empathy, developed in Chapters 4 and 5, to identify different ways in which CTs can mediate empathy and change what it means to be empathetic on both individual and societal levels. Together, these different dimensions of "CT-mediated empathy" can be used as a framework to evaluate and improve technologies, their implementation, and their use. The chapter ends with implications and recommendations for design, research, education, and policy toward an empathetic sociotechnical future.

Chapter 7: *AAC technologies: a case study for technology-mediated empathy*

This chapter explores the technological mediation of empathy brought about by AAC technologies. The framework of "CT mediated empathy" that was developed in the previous Chapter will be applied to this group of technologies, informed by insights

from user experiences. This chapter, in contrast to the others, involves an empirical component. Namely, I collected testimonies from AAC technology users regarding their experiences of AAC-mediated empathy to inform the analysis. This analysis consists of two parts: reflections on an individual and societal level. For the individual level, I discuss three different kinds of human-technology relationships related to experiences with AAC technologies. On the societal level, I discuss how social norms, visibility, and stigma play a role in the impact, potential, and risks of AAC technologies. Based on these insights, I use the theoretical framework developed in Chapter 6 as a structure to map out different ways in which AAC technologies can mediate empathy. This chapter demonstrates the framework in action and brings to the fore various ethical concerns and recommendations for empathic AAC technology design and implementation.

Part I: Problems in defining empathy



2. Defining and measuring empathy: a systematic review of the meaning of empathy in autism research

This chapter has been published as "A reflective guide on the meaning of empathy in autism research." (Bollen 2023). The text has been slightly adapted in style for consistency.

2.1. Introduction

Empathy is a frequently researched but highly ambiguous concept (Cuff, Brown et al. 2016). The term empathy can refer to co-feeling, mentalising, to something inherently good, something inherently biased, etc. These discrepancies may seem purely semantic, but if these are not explicitly discussed this can lead to various problems in research practice. In fact, it already has. The exact interpretation of the concept drastically changes the meaning of a hypothesis, a claim, research results, and the validity of chosen methods. For example, when a researcher understands empathy as emotion contagion, one should not assess this with a perspective taking task, nor would findings of the latter kind be of interest to this researcher. Lack of caution with respect to this complexity can harm the progress in understanding empathy, as it makes the field prone to miscommunication, misinterpretation, or even (unintentional) scientific malpractice. Crucially, empathy is often connected to morality (for example Zalla, Barlassina et al. (2011)), which makes this conceptual confusion even more problematic.

This is showcased by the role the concept of empathy plays in the context of autism research. Autism is typically conceptualised as a neurodevelopmental spectrum condition associated with social, communicative and sensory idiosyncrasies. According to the dominant narrative in both autism research and societal perception, autism is associated with empathy deficits. However, this view is increasingly attracting resistance. For example, testimonies of autistic people often include hyper-empathic experiences, contrasting the current stigmatising narrative that autistic people lack empathy (Welch, Cameron et al. 2020). Furthermore, the theoretical account of the so-called *double empathy problem* ascribes the apparent empathy deficits seen in autistic behaviour to an in-group/out-group issue, arguing non-autistic people have trouble empathising with autistic people, and not only the other way around (Milton 2012,

Chown 2014). Another hypothesis aiming to explain both seeming deficits and empathic experiences associated with autism is the empathy imbalance theory, arguing that autism is associated with difficulties only concerning *cognitive empathy* and heightened or intact *emotional empathy* (Smith 2009). While there is empirical evidence supporting this view, this seems to be at odds with the proposed increased cognitive endeavour made by autistic individuals to overcome differences in interactions across neurotypes (Beck 2018). Importantly, what is actually being understood as *empathy* varies substantially between the accounts described here.

Recently, Fletcher-Watson and Bird (2020) argued for the need to be wary of the various meanings empathy can have, and specifically the way they influence theories of autism and research methodologies. They illustrated how diverging meanings of empathy are currently causing problems in the progress of autism research, affecting the societal perception of autism. The problem of the variability in understandings of empathy is getting acknowledgment inside and outside of autism research. Most notably, a critical review of the concept by Cuff, Brown et al. (2016) aimed to provide a new, more clear, and complete definition of empathy by combining different aspects of empathy found in various definitions used in the literature they investigated. In doing so, they mapped out several important features that conceptualisations of empathy can have. However, it is unclear whether these features account for all diversity in what researchers mean by empathy. Definitions of empathy may diverge in ways not yet made explicit, and as a result, not looked out for when reading or writing about the concept. To be able to approach the concept with care, and critically reflect on what it means in a certain context, first a deeper understanding of the diversity of possible meanings of empathy one can encounter is needed. A systematic interdisciplinary analysis mapping out this conceptual diversity in detail was, to the best of my knowledge, missing.

Considering the immense volume of empathy research, covering an expansive range of disciplines, such an undertaking requires a collaborative effort in academia over time. This chapter takes the first step by mapping out the ambiguities of the meaning of empathy within the scope of autism research. This context is of particular relevance because of the impact the conceptual confusion has on this field, and the unique insights autism research brings to understandings of empathy.

With the aim to clarify the complex diversity of what we mean by empathy, the main question explored in this chapter is: in the context of autism, on what fronts do understandings of empathy diverge? I conducted an extensive multidisciplinary literature search on autism and empathy to take stock of the different

conceptualisations of empathy that are being used. To answer the research question, I identified similarities and differences between these understandings. Additionally, I made an overview of different methodological approaches to measure empathy as found in the literature. Together, these findings create a comprehensive framework that grasps the diversity of phenomena empathy can refer to in the context of autism research.

No new definition of empathy will be proposed here just yet. Instead, this chapter motivates and guides critical reflection and careful use of the concept, especially when translating between different contexts or disciplines. I pinpoint which areas require extra attention and reflection when engaging with empathy in research, and I explicate the implications for empathy assessment strategies.

2.2. Methods

The methodology was inspired by, but not identical to, systematic reviews as widely used in biomedical sciences. It was designed to achieve an accurate representation of the research field this study aspires to serve (Polonioli 2017). The body of literature included in this study is an extensive representation of literature explicitly focused on empathy and autism. This study aimed to examine how empathy is being understood and measured in this body of literature. The collection of definitions of empathy found in literature was analysed by looking for factors that can account for the similarities and differences between the findings. In this section, each step of the process will be discussed in more detail. Each step was executed by the author.

2.2.1. Data collection

The datasets needed for this project were 1) a list of understandings of empathy and 2) a list of methods to measure empathy in literature on autism and empathy. This dataset was acquired in three steps: literature search, literature selection and data extraction. The details of these steps will be described below and are summarised in Figure 1.

I conducted a literature search on Web of Science, PubMed and Philpapers. The search condition on the first two was "empathy" *and* "autism" or "ASD" or "autistic" in the title, and published before the end of 2020. The title-focused condition was chosen to ensure (to the best extent) that the main focus of the article was on empathy and autism and, as such, maximise both the relevance and manageability of the findings. On Philpapers, I used the same conditions, but the keywords were applied to

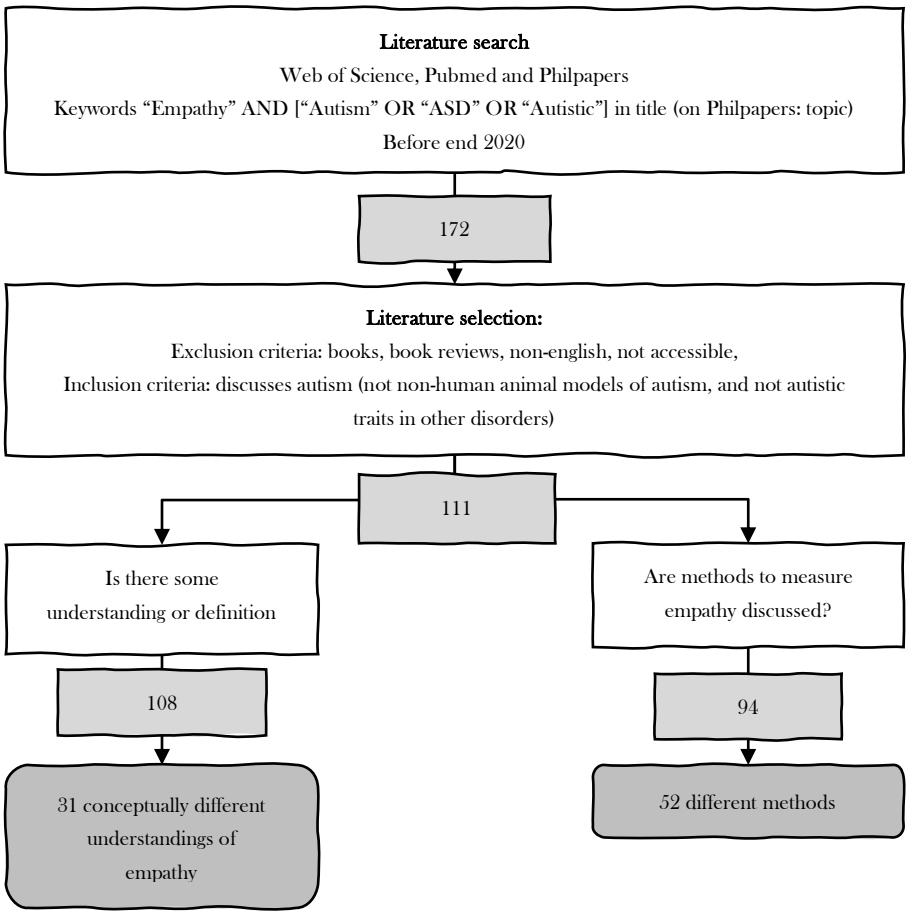


Figure 1. Schematic overview of method. From top to bottom. The literature search resulted in 172 documents. The literature selection resulted in 111 documents.

the topic instead of the title. I did this to include additional relevant articles from the field of philosophy, taking into account the difference in norms of title design compared to natural and social sciences. After removing double findings, this resulted in 172 documents.

In the selection phase, books, book reviews, non-English documents, and inaccessible documents got excluded. An important inclusion criterion was that literature focused on autism. For the purpose of this study, non-human animal models of autism and explorations of autistic traits in other disorders were not included for further analysis. The selection phase resulted in 111 documents published between February 1992 and July 2020 (a list of the articles included in the dataset can be found in the appendix).

The next phase, data extraction, had the goal to find in each document 1) how empathy was being understood, and 2) what method(s) was/were used or discussed to measure empathy. Some articles did not provide an explicit definition or conceptualisation of how empathy was understood by the authors. In these cases, I extracted an implicit understanding of empathy from the text by interpretive reading, which was needed for 13 articles. In 3 articles, no understanding of empathy was found at all, neither explicit nor implicit. From these 108 understandings of empathy, I grouped together identical or highly similar definitions. This resulted in 31 different conceptualisations of empathy. In 94 articles one or more methods to assess empathy in humans were discussed and/or executed. In total, I found 52 different methods in this set of literature.

2.2.2. Analysis

The analysis of the set of different conceptualisations of empathy aimed to find a comprehensive list of factors accounting for all the similarities and differences between them. My approach was as follows. I created models to schematically represent the content of each conceptualisation of empathy. So, each model captured what was meant by empathy in one or several works included in this study. To illustrate, "an emotion that helps one understand another's emotion", consists of: a [self] and an [other] both having an [emotion], the [self] having an [understanding] of the [other's emotion] and the [self's emotion] [improving] that process of [understanding]. These are the elements this meaning of empathy consists of.

Based on these elements, I grouped the models in various ways, considering which elements they had in common and which they had not. For example, models that consider empathy a purely cognitive process can be distinguished from those that consider it a purely affective process, and again from those that understand it as a combination of these two processes. Within these clusters, models differ from each other on other fronts, at times overlapping with similarities to some models in another cluster. Correspondingly, I grouped and re-grouped the models based on their similarities and differences in an iterative process. I did this with the goal to identify the characteristics of the models that made them different from others. In other words, to find all dimensions (for example, the cognitive and/or affective nature of empathy) along which meanings of empathy diverge. The analysis was completed once I identified a list of dimensions that could account for all the differences between the 31 conceptualisations of empathy found in the dataset, while all dimensions on the list would be needed to do so (a minimal and sufficient list). This means that disregarding

one of the dimensions would result in a failure to distinguish between some of the definitions, and adding a dimension to the list would not make a difference. I found a list of 12 dimensions that met this requirement.

Methods used to measure empathy in participants say a lot about what is meant by empathy in practice – and how or whether it is recognised in individuals. So, in addition, I analysed the list of empathy assessment methods mentioned in the literature set to create an overview of the variety in approaches to make empathy measurable/observable. I clustered methods that were based on similar principles (for example a questionnaire or behavioural experiment) or worked on similar levels (for example behavioural or physiological). I did this in parallel with and complementary to the main project, which was, to recall, to analyse the diversity in empathy definitions. Making an overview of methodological strategies used in the same literature set served to lay a foundation for reflection on the relationship between empathy assessment and what is meant by empathy conceptually (see section 2.4).

2.3. Results

2.3.1. Defining empathy

In the inspected literature, I found 31 different understandings of empathy. In the analysis, I discovered a list of 12 dimensions that together account for the differences between all these understandings. In other words, what is meant by empathy diverges along 12 dimensions (see Figure 2). In this section, I will discuss these dimensions one by one. To enhance the structure and readability of this section, I grouped the dimensions into themes: cognitive and/or affective states and processes (1,2,3,4), access to the other's inner life (5,6), functions of empathy (7,8), self-other distinction (9,10), and self- or other-orientation (11,12).

2.3.1.1. Cognitive and/or affective states and processes

The most frequently discussed theme in the literature on empathy concerns proposed discrepancies, or a lack thereof, between cognitive and affective processes and states and whether they ought to be included in definitions of empathy. Here, *cognition* refers to thoughts, beliefs and perspectives, whereas *affect* concerns emotional states and the experience and elicitation of feelings. This categorisation is used here so as to comprehensively describe the variety in definitions of empathy that relates to this

theme. The term *self* will be used here to refer to the empathiser and *other* to the person one empathises with. In relation to this theme, what is meant by empathy can diverge across the following four dimensions.

Dimension 1: The state of the other. There is disagreement on whether the other's affective states, cognitive states, or both, enable empathy in the empathiser. The vast majority of the articles that I analysed explicitly propose a definition including both cognitive and affective states of the "other", either being assessed through different processes, or combined. Only five articles focused exclusively on the other's cognitive states within their definition, and the remainder suggested only emotions as being the enabler of empathy. From here on, the affective and cognitive states of the other will be referred to as O-AS (the other's affective states) and O-CS (the other's cognitive states), respectively.

Dimension 2: The state of the self. Similarly, the state of the self that was understood as empathy was disagreed upon; again, being of cognitive nature (S-CS), affective (S-AS) or both. This aspect was discussed more explicitly and heavily in the literature than the previous one. It comes down to the question: is empathy an emotion, a cognitive endeavour, or a combination of these? To recall, dimension 1 refers to the state of the other, and dimension 2 to the state of the self.

Dimension 3: Cognitive and affective empathy. In slightly less than half of the included papers, differences in the cognitive and/or affective nature of the states of the self and/or other were made explicit by making a distinction between *cognitive empathy* (CE) and *affective empathy* (AE). However, these terms were not always used to describe the same processes. In 11 definitions the terminology of CE and AE were included, in one of the following ways.

	CE referring to:	**AE referring to:**
Model 1:	S-CS directed at O-CS	S-AS directed at O-AS
Model 2:	S-CS directed at O-CS	S-CS directed at O-AS
Model 3:	S-CS directed at O-AS	S-AS directed at O-AS
Model 4:	S-CS directed at both O-CS + O-AS	S-AS directed at O-AS

So, for example, the process of understanding the other's emotional experience (S-CS directed at O-AS) could be called affective empathy (in model 2) or cognitive empathy (in model 3 and 4). Note that for example model 1 and model 2 understand cognitive empathy the same way, but they differ in the way they understand affective empathy. In addition, the term *Theory of Mind* (ToM) is also sometimes used to distinguish between these processes in various ways (most often as S-CS directed at O-CS).

Dimension 4: The relation between affective and cognitive empathic states. The interaction between S-CS and S-AS is debated as well. For example, by including S-CS only as a result of S-AS (as a response to O-AS) (Meng, Shen et al. 2019, Stroth, Paye et al. 2019). In contrast, several other definitions included S-AS as a result of empathic S-CS, either as the only pathway towards empathic emotion, or as so-called *indirect AE* (*direct AE* referring to the direct relation between S-AS and O-AS).

2.3.1.2. Access to the other's inner life and emotions

Dimension 5: Approaches to access the other's state. Each approach to empathy faces the following issue: how can one access or yet catch a glimpse of someone else's inner life? Most theories on this topic focused on behaviour as a medium for communication between two individuals, with each their own inner life. Through verbal and nonverbal expressions of the other, the self has access to their mental and emotional states. Some explicitly acknowledge that these expressions contain socially constructed cues, which facilitate the translation between one experiential life world and the other. An issue that prominently emerged in the analysis regarding this theme was the question whether accessing and addressing another's mental and emotional states is active or passive, unfolding on a conscious or subconscious level, and whether empathy is an automatic experience or an intentional endeavour. While some include spontaneity or naturalness in their definition of empathy, others contrastingly refer to empathy as making an effort to understand and attune to someone's (sometimes completely) different life world than yours. In some definitions, but not all, a differentiation is made between AE and CE in this sense, posing AE as an intuitive, basal process, whereas CE requires effort and intention.

Dimension 6: The position of emotion recognition. The role ascribed to emotion recognition varied in such a prominent way, that while it relates to the previous dimension, it adds a dimension of its own. Emotion recognition was most

often implicitly reduced to inferring an emotion from facial expressions, behaviour or situational contexts (opposed to, for example, literal linguistic expressions of emotions). Importantly, there is disagreement on whether emotion recognition is an empathic process in itself or can be part of it; and if not, whether it an essential precursor, mediator, or simply a useful information source. Emotion recognition is often included in CE, but sometimes in AE. The placement of emotion recognition in the understanding of empathy is especially of importance as this ability was not infrequently used as a measure for empathy, which will be discussed later on.

2.3.1.3. What is empathy supposed to do, and what not?

Dimension 7: The function of empathy. In some cases, objectives of empathy were included as properties of empathy itself in the definition. Different interpretations of this are not necessarily incompatible but differ from each other in the way they frame empathy and its role in social interaction. The most popular example is the elicitation of an "appropriate emotion" in the self, in response to O-AS. This has been proposed as an alternative to the requirement of empathy as having to evoke the same emotion within the self as the one experienced by the other (which is sometimes referred to as empathy, and sometimes referred to explicitly as precisely not empathy, but rather emotion contagion or mimicry) (Baron-Cohen and Wheelwright 2004). For example, someone may feel sadness as someone else feels scared. Even though this is not the same as the emotion the other is feeling, it seems "appropriate", and could therefore be labelled as empathy. By some researchers, not merely the elicitation of an emotion, but the execution of specific behavioural responses (those considered to be appropriate to the situation) was included in the definition of empathy itself. From an alternative perspective, this behaviour itself was not included in the understanding of empathy itself. Rather, the objective of empathy was seen as providing motivation to execute such behaviour. In this context, the behaviour was often referred to as "prosocial behaviour" rather than "empathic behaviour". This places empathy in an important position to facilitate relationship and community building, and social bonding in general. This narrative was frequently situated in an evolutionary or developmental perspective. Lastly, others presented accessing someone else's inner life in itself as the goal of empathy. This included definitions of empathy as being open to the life world of someone else or forming an interpersonal bridge. This could mean appreciating the similarity of the other's life to yours through identification on the one hand (Komeda, Kosaka et al. 2015), or, contrastingly, the ways in which it differs from yours on the other (Jurecic 2006, Eyuboglu, Baykara et al. 2018).

Dimension 8: A place for similarity bias. An interesting paradox is the emphasis on similarity between the self and other on the one hand, and self-other distinction in terms of diversity on the other. This relates to the different functions ascribed to empathy. From the perspective of empathy as a strategy for social bonding with its evolutionary benefits, similarity biases make perfect sense as being inherent properties of empathy. Contrastingly, in a view of empathy as an endeavour to understand a perspective or life world different from yours, such biases would not be seen as characteristics of empathy, but rather "pollutions" of the empathic ambition. This shows how a difference in the definition of empathy can impact not only the role ascribed to it in social interaction, but also its value in dealing with diversity in society: either bridging gaps or strengthening them.

2.3.1.4. Self-other distinction

Dimension 9: Awareness of self-other distinction. An aspect in which a seeming paradox presented itself was the emphasis on either self-other distinction or congruency. In a subset of the definitions, scattered over the dimensions discussed before, self-other distinction played a prominent, or even essential role. This was understood as the awareness that the other is different from you, and has their own life world, thoughts and emotions. On an exclusively cognitive level, it referred to the understanding that the other's beliefs and thoughts are different from yours. Concerning emotions, this referred to the awareness in the self that their emotional experience is an empathic response to the other's. To some, the awareness of this causality makes the difference between empathy and emotion contagion or mimicry, implying the latter is not actually empathy, however to others it is (or a variety of it, referred to specifically as "motor empathy"). Interestingly, to some, this self-other awareness on the emotional level was included in affective empathy, while others defined this as cognitive empathy.

Dimension 10: The effect of self-other distinction. This form of self-other distinction was sometimes used to make sense of the relationship between personal distress and empathic concern as manifestations of S-AS. In this narrative, lack of understanding of the causality between S-AS and S-OS increases personal distress as a result of empathic connection. Instead, proper self-other distinction could protect the self from this effect, and rather let the S-AS motivate prosocial behaviour through expression and acts of concern.

2.3.1.5. Self- or other-orientation

Dimension 11: Self-awareness. While empathy is often framed as an other-directed, or at least interpersonal phenomenon, self-reflection and self-awareness prominently came to the fore in a diverse subset of the included body of literature, either as playing an important role in, or actually being a part of, empathy. In one model of empathy for example, empathy was presented to exist on a scale from self to other: with self-oriented empathy (understanding, awareness and reflection on own thoughts and emotions) on one end and other-oriented empathy (considering and responding to the other's perspective and feelings) on the other (Robinson 2020). This understanding of self-oriented empathy plays a part in other models as well, yet not as being an empathy-kind, but as an important mechanism to facilitate empathy. Self-awareness and reflection came to the fore as needed for self-other distinction, in making sense of the social world, and of emotions (for example, as modelled in Bird and Viding (2014)). In relation to this, the comorbidity of autism with alexithymia presented itself as a topic of interest. This trait is characterised by difficulties in understanding, describing, and recognising one's own emotions, and might therefore (indirectly) interfere with empathy (Mul, Stagg et al. 2018).

Dimension 12: Self- or other-oriented empathic emotions. Finally, as discussed in dimension 10, a proper self-other distinction is sometimes suggested to decrease personal distress relatively and make room for empathic concern. These experiences are framed to be, respectively, self-oriented and other-oriented. According to this narrative, self-awareness is needed for intact self-other distinction and, as a result, for other-oriented empathic emotions. Keep in mind that the term "self-oriented empathy" can refer to both self-awareness (which is, as proposed, essential for other-orientation), but also to personal distress as a self-oriented manifestation of empathic emotion.

In summary, defining empathy appears to be a complex endeavour concerning either or both similarities and differences, self- and other-orientation, self- and other-understanding, and connecting with, while separating oneself from, the other.

2.3.2. Methods to measure empathy

In the previous section, I discussed the dimensions that make up the diversity of meanings of empathy. Considering the diverging nature of what is meant by empathy, it is unsurprising that there is a wide assortment of methods used to measure it. In

total, I found 52 methods in the included literature. In this section, I will summarise the types of methodologies that were found. By exception, articles included extensive reflection on different methods, and defended their choice in relation to the definition they provided.

In half of the articles, self-report questionnaires were used as (one of) the method(s) to measure empathy. In some cases, parents or caregivers filled out such questionnaires to assess empathy of a child. Such measures focus on what is sometimes called *trait empathy*, opposed to *state empathy*. This means that these questionnaires reflect on one's empathic tendency, ability or drive in social interactions in general, in contrast to experimental procedures that assess one's responses to specific social stimuli.

Other methods to assess empathy used self-report involved interviews on, for example, moral reasoning (Gleichgerrcht, Torralva et al. 2013, Senland and Higgins-D'Alessandro 2016), or reactions to a friends' distress (Jamil, Gragg et al. 2017). Other procedures included movies, stories or game playing as stimuli, after which subjects needed to describe what they thought or felt (for example Lockwood, Bird et al. (2013), Bellebaum, Brodmann et al. (2014), and Trimmer, McDonald et al. (2017)). The benefits and pitfalls of self-assessment were frequently discussed in literature (see, for example, Johnson, Filliter et al. (2009)). Besides the more general issue of bias, one concern that is being raised is a potential deficit in self-reflection and self-awareness associated with autism (and/or alexithymia, with its high co-occurrence). Interestingly, as discussed before, self-reflection appeared to be of high interest in defining empathy as well.

Avoiding this complexity, other methods rely on observations and reflections of researchers or care providers. A selection of the studies provided detailed descriptions on how verbal and non-verbal responses were rated on empathic properties (for example, Holopainen, de Veld et al. (2019) and Sivaraman (2017)). In Chene, Chiang et al. (2010), kindness, tolerance, and respect were assessed in interactions, as indirect measures of empathy. Such descriptions reveal many underlying assumptions and understandings of empathy as a concept. Some of these might be described by some as indirect or secondary measures, but whether these should be labelled as such depends on whether and where the measured quality is placed in the definition of empathy.

Another example of a topic of controversy in the definition of empathy that was represented in methodological differences is the role of emotion recognition. Eye-reading and face-reading experiments are frequently used as measures of empathy,

sometimes by themselves, but most often as part of a mixed methods approach to capture the multi-dimensionality of the most frequently used understandings of empathy. These procedures are most prominently presented as a measure for "cognitive empathy" specifically. In some studies, this was combined with self-assessment of one's emotional response to an emotional stimulus, as a measure of their interpretation of "affective empathy". In few articles, methods designed to test ToM were used as a measure for empathy, either exclusively, or in addition to other methods.

Lastly, a share of the empirical studies addressed empathy on a neurological or physiological level. These included, for example, endeavours to map the functional neuroanatomy of empathic experiences, and from there, exploring atypicalities of different neurotypes. The definition of empathy influenced such practices in the type of stimuli and/or the exercise given to the participants. Methods on the physiological level included using measures for arousal to certain stimuli, such as heart rate or skin conductance. Another example is the assessment of motor empathy or mimicry measuring facial muscle activity (Bons, van den Broek et al. 2013). The use of such methods inspires the question where empathic responses should be found: in behaviour, in experience, in our body, in our brain? This, again, represented the variation in understandings of empathy as a concept.

2.4. Discussion

Empathy and autism are frequently connected in academic literature. While all articles examined in this study explored empathy and autism, the research aims and angles varied substantially. Most studies focused on atypicalities of empathic experiences and behaviour associated with autism, while some articles (contrastingly) explored empathy and autism in light of *neurodiversity* appreciation and the *double empathy problem*. At the same time, the meaning that is associated with the concept "empathy" varies fundamentally in multiple aspects. In this review, I identified no less than 31 meaningfully unique understandings of empathy, varying across 12 dimensions. This can be interpreted as such: each definition can be described as a combination of stances on each dimension, a location in a 12-dimensional space. I anticipated to find a variety of meanings of empathy, yet the degree to which these diverge and the number of areas in which they diverged is noteworthy.

Additionally, I identified several clusters of different methodological strategies, and I analysed them with regard to the way they serve to assess specific conceptual

understandings of empathy. Interestingly, the methods themselves often revealed more or even contradictory information about the authors' understanding of empathy compared to the included definition. Explicit theoretical reflection or empirical evidence on the validity or appropriateness of the chosen method as related to their conceptual frame of empathy was rare (see for example Harrison, Brownlow et al. (2020) for a meta-analysis on this issue). This suggests that readers are implicitly burdened with a responsibility to interpret research findings according to the operationalisation of empathy that is embedded in the methodology, rather than the theoretical foundation provided.

Some of the dimensions identified here have been discussed before, as has the conceptual confusion surrounding empathy in general (Cuff, Brown et al. 2016). However, my study reveals a more extensive and detailed overview of the variety in areas of confusion. Insights and implications for theories of autism and measuring empathy are discussed below. Finally, a practical framework to facilitate critical and explicit reflection on what is meant by empathy is presented, grounded upon the results of this study.

2.4.1. Main insights and implications

Firstly, the findings of this review reveal that the confusion concerning the affective versus cognitive nature of empathy goes further than the question whether the experience of the self is of cognitive and/or affective nature. Various accounts explicitly included interpretations for so-called *cognitive empathy* and *affective empathy*, but their relative meanings varied across authors. To illustrate, a hypothesis that is increasingly supported by empirical studies and theoretical reflections, suggests that the atypical empathic experiences and reactions associated with autism result from an imbalance between affective and cognitive empathy; including difficulties with cognitive empathy while having intact or even increased affective empathic experiences (see Smith (2009), and, for example, Shalev and Uzefovsky (2020). Accordingly, deficits in cognitive empathy might be responsible for heightened personal distress as a result of empathic emotions, and complicate manifestation of these emotions as empathic concern. In this narrative, cognitive empathy relates to a clear understanding of self-other distinction. By contrast, others find that autistic persons make more use of cognitive abilities to make sense of others emotions and behaviour than those without this diagnosis (for example Schulte-Ruther, Greimel et al. (2014)). Possibly, this is because a greater cognitive endeavour is required to bridge between autistic and non-autistic mindedness, of which the burden to a great extent

lays with the minority (being autistic) (Beck 2018). Such findings are not necessarily incompatible with each other, if one pays close attention to the way the distinction between cognitive and affective processes is being understood, and which processes are actually being included in these accounts. Cognitive empathy can, for example, refer to the ability to interpret behavioural cues, it can highlight the awareness of self-other distinction, it can be used to describe the endeavour to theorise on the other's perspective, or merely to the capacity to read facial emotion expressions. Methods to assess empathy vary accordingly, and so does the role cognitive empathy plays in theories on empathy and autism. Similar variability is present concerning affective empathy, referring to, for example, the affective nature of an empathic experience, or to the affective nature of the states in the other that enable empathy. The distinction between personal distress and empathic concern as varieties of affective empathy complicates this even further, as it intertwines with various interpretations of cognitive empathy. This raises the question how feasible, comprehensible, and even useful this distinction might be in the endeavour to make sense of empathic differences. Currently, it confuses the research landscape, both in theoretical reflections as in methodology. Furthermore, the meaningfulness of distinguishing between cognitive and affective states is something to be questioned to begin with, which seems to be overlooked in the majority of the accounts included in the present study.

Secondly, emotion recognition arguably is merely one of the ways to assess another's life world. However, the extent to which it was brought to the fore in much of the research examined, and the observation that empathy is sometimes even being reduced to it in methodological operationalisations, is noteworthy. Understanding facial expressions plays a central role in empathising, according to a significant part of the literature. This prominent focus on facial expression as "communication media for emotions", is not surprising. However, as autism is often associated with atypical use of this way of communicating emotions (see, for example, Faso, Sasson et al. (2015)), a more nuanced view on the relationship between empathy and facial emotion expressions might be required. While facial emotion expression tasks seem to be an appropriate assessment of empathy in neurotypicals, the validity to use these methods involving autistic research participants needs to be reflected upon, examining measurement invariance. That is, unless a majority-privilege is included in the definition of empathy, such that adjustment to certain norms is required for someone to be considered empathic. Such a way of defining empathy could be appropriate in certain interpretations of the objectives of empathy, namely those with a focus on empathy as an adaptation to strengthen social coherence, one's position in one's social

environment, and proximal relationships (Preston and De Waal 2002). Such an assumption is, however, inappropriate when ascribing to empathy a role of bridging between individuals, appreciating another's life world, and attuning to one another's needs. Considering different modes of self-expression and communication might open up new perspectives on empathy between autistic people and neurotypicals. Whichever way empathy is being interpreted by a researcher, explicit reflection on this issue is essential in validating the appropriateness of their methodological practices, and, as such, the meaning of their contribution to autism research.

Third, behavioural responses are widely used in empirical studies to assess empathy in research participants, as found here. Therefore, they are (maybe implicitly) included in an understanding of empathy itself in academic practice. This raises a similar issue as the one discussed previously concerning facial expression recognition. Some studies that used observations of social behaviour to assess empathy included detailed descriptions of what kind of responses and actions were understood as empathic and to what extent (for example Holopainen, de Veld et al. (2019) and Sivaraman (2017)). Socially appropriate empathic responses can be given by someone who is not empathising with the other at all but is highly skilled in recognising social scripts. And vice versa, reactions from someone who experiences heightened empathic emotions might be considered to be "over-emotional". But again, whether these scenarios would be considered to contain empathy depends on the definition. For example, abiding by social etiquette by giving appropriate responses is beneficial for relationships in most cases (Sivaraman 2017). Being empathetic could be, in that sense, understood as recognising and responding to the needs of the other. Intelligently following the appropriate social script might provide the other with the sense of support they need, while a sincere but overwhelming response of compassion might not. There is a parallel with the issue of emotion recognition in the reduction of expression into behavioural output. Empathetic responses might not be the same as an expression of experiencing empathy, as facial postures might not always be direct expressions of emotions. That is, unless experiencing empathy is being defined as being aware of which response to give, and feeling an emotion is being defined as showing the appropriate facial expression. Some authors acknowledge this issue in theorising that autistic people do not necessarily have a deficit in empathy, but have trouble in expressing this into behaviour (Senland and Higgins-D'Alessandro 2016, Cascia and Barr 2017). Following the account of the double empathy problem, this means having trouble in demonstrating empathy in a way that is attuned to non-autistic needs, questioning the ability of neurotypicals to respond empathically to (i.e.

responding to the needs of) people on the spectrum. This latter question was not addressed as a form of empathic behaviour in the empirical studies that used behaviour as a measure for empathy, but it was explored in papers including anecdotic evidence of perceived challenges (for example in Hodge (2013), Jurecic (2006), and Louis (2008)).

Fourth, the proposed objective of empathy, when included in a definition, drastically impacts the appropriateness of considering similarity bias to be inherent to empathy or not. If empathy is framed as a capacity that allows one to take a different perspective and connect with the life world of another, signs of strong similarity bias should make someone to be assessed as less empathetic. However, if empathy is understood as inherently biased, the traits of the same person would be considered differently. On the account of the double empathy problem, a parallel can be made for a *neurosimilarity bias*, favouring empathy towards modes of expression similar to yours (either being a characteristic of empathy, or induced externally, depending on the definition of empathy). Making this issue explicit is essential for the debated value of empathy in moral reasoning and in shaping social networks and societal structures, and ultimately, for the framing of empathy as a virtue. This also relates to the discrepancy between trait and state empathy, a topic of high importance in decisions on methodological practices. State empathy could be considered to be the product of several different factors: the subject's trait empathy, the content and type of stimuli (linguistic, visual, etc.), and the context (in research, for example: instructions, in real life: distractions, relationship to other, etc.). The issue described before can be demonstrated in this model as similarity bias influencing state empathy through being part of empathy as a trait, or through the context.

Lastly, the importance and role of self-reflection and –awareness for empathy has revealed itself here. The frequently assumed other-oriented nature of empathy might be a severe oversimplification, leaving the relation between self-directed emotions and understanding to empathy underexposed. This narrative can imply empathic difficulties being associated with self-centeredness, while this is contradicted by theoretical accounts of empathy and empirical data including self-reference as essential or even integral to empathy (see, for example, Lombardo, Barnes et al. (2007) and Robinson (2020)). The complexity, again, demonstrates the urgent need for explicit reflection on the understanding of empathy as well as the need to frame its function in society.

2.4.2. Recommendations and limitations

As these insights indicate, the confusion on the meaning of empathy shape findings and theories in autism research, as well as their quality. Unfortunately, explicit reflection on defining empathy and on how this informs methodological decisions was most often lacking in the research reviewed in this study, in line with the concerns raised by Fletcher-Watson and Bird (2020). This increases the risk to 1) judge results as contrasting or incompatible, while they would actually fit the same theoretical paradigm, 2) misuse results that support a different interpretation of empathy than used by the reader, or even 3) misinterpretation of results by the authors themselves in cases where methods do not match the presented theoretical framework. Besides the delay of scientific progress this is accountable for, the societal impact is worrisome. The way empathy and autism are being associated in academia contributes to the way autistic people are being perceived outside academia as well (by health-care providers, institutions, developers of assistive technologies, relatives, and in public discourse in general), affecting daily life experiences of numerous individuals (Welch, Cameron et al. 2020). Researchers in this field contribute to how autism is being understood, scientifically and indirectly, socially. This highlights the importance of careful, critical and explicit reflection on the framing of empathy and its relation to autism, so as to improve the science of autism in both efficiency/progress and in societal responsibility. Therefore, research on empathy and autism should include explicit reflection on the way empathy is being understood and accordingly, a critical defence of the appropriateness of choice of methodology. Consequently, caution must be taken into interpreting such findings and translating them into a different context. Unfortunately, this is not the current norm in the field.

Based on my review, I have developed the framework in Figure 2 that can be used to guide reflection on research on empathy and autism. The questions provided there can help to make sense of the understanding of empathy used in the research that I analysed, taking into account methodological decisions if assessing empirical studies. Consequently, caution must be taken when combining and comparing different findings if they are founded upon dissimilar understandings of empathy. Lastly, the framework provides topics that require attention in designing and conducting research, and explicit reflection in documentation.

Next to the need to systematically embed reflection on empathy, some specific topics came to the fore that require more attention. First, the appropriateness of using existing empathy assessments to measure empathy in autistic people urgently requires investigation. Strikingly, a review of a variety of self-report questionnaires on empathy

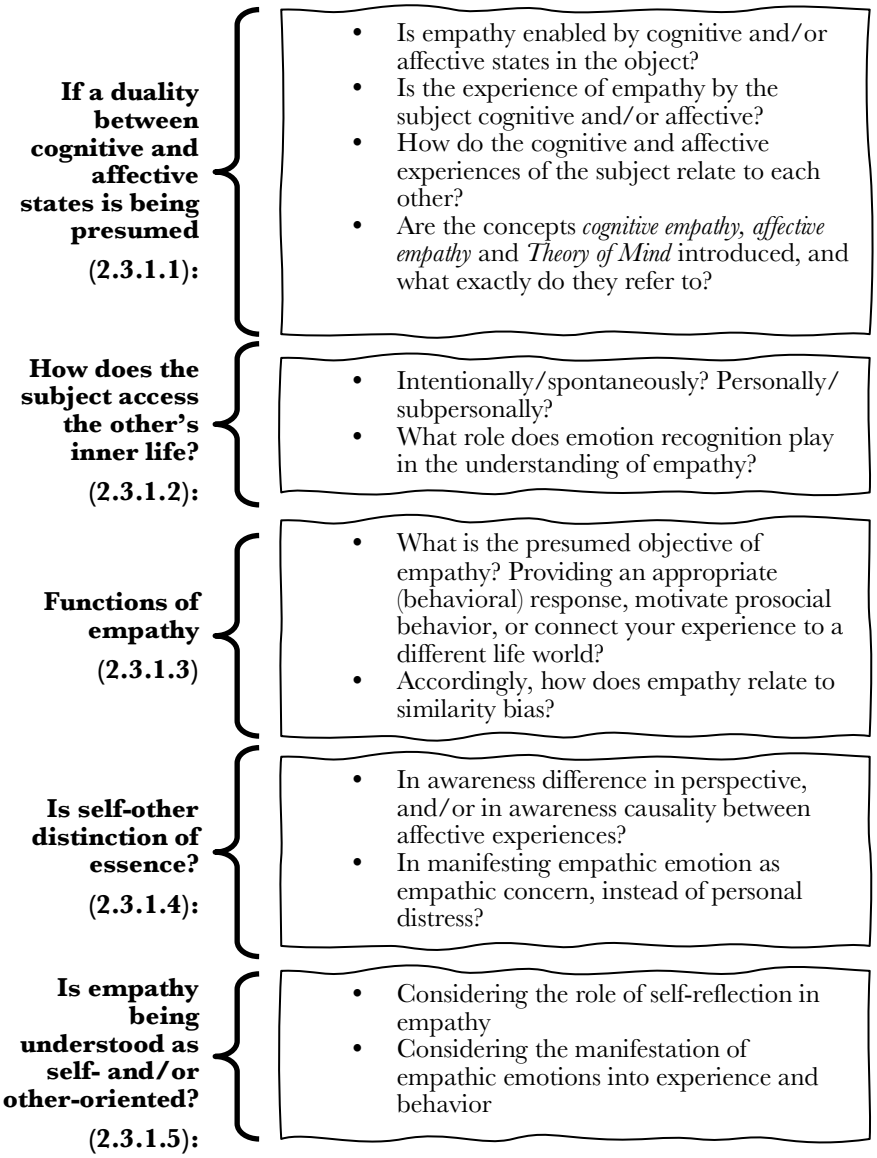


Figure 2. A framework to guide reflection on the understanding of empathy in autism research.

used in autism research found high evidence to qualify the most popular questionnaires (for example the Empathy Quotient varieties) as insufficient, as both evidence for content validity and measurement invariance appeared to be lacking for autistic samples (Harrison, Brownlow et al. 2020). In other words, it is unsure whether these methods appropriately assess empathy content-wise (accepting the definitions

these methods were created with and for), and whether they assess the same traits in autistic individuals as in a neurotypical sample. Concerning their investigation, Harrison et al. wrote: *"Until measurement invariance is established, using these measures to demonstrate empathy deficits in autistic individuals may be as good as using a Stroop task to examine executive functioning deficits in those with colour blindness"* (Harrison, Brownlow et al. 2020). Such critical investigations are also required for other types of procedures, for example behavioural studies, with respect to the relationship between behaviour and expression. Another area that might be fruitful for advancing our understanding of the relationship between autism and empathy, and for design of care to address actual challenges faced by individuals on the spectrum, concerns the relationship to *the self*. Research focusing on self-awareness and embodiment might shed light on the relationship between seeming empathy deficits and challenges in experiencing the self. Finally, for all recommendations given here, inclusion of autistic people in design of research and methodologies is of essence to overcome neurotypical biases currently underlying the research field (Fletcher-Watson and Bird 2020, Welch, Cameron et al. 2020).

Whereas the body of literature included in the analysis was extensive, it was not complete. For example, studies without an explicit focus on empathy and autism were not included, while some of these might be of importance in the area. Books were also not excluded, as well as non-English literature. Secondly, the analysis was done on a linguistic and interpretive basis. As a result, it could be that for some articles the meaning of empathy that was extracted from it does not fully cover what the authors actually mean by empathy. While it is less likely that this would have resulted in a completely new dimension rather than a different position on the twelve dimensions presented here, this possibility is not to be excluded. This highlights even more the importance of explicit documentation of what is meant by empathy in an article about the concept.

2.5. Conclusion

Empathy can mean many different things. In 111 papers on autism and empathy, 31 unique conceptual interpretations of empathy were found. These diverged across 12 dimensions. Sensitivity to these dimensions is recommended to interpret and conduct research on empathy and autism, as they drastically shape the meaning and impact of findings and claims. Additional attention to empirical studies is required, so as to reflect on whether strategies to measure empathy align with what is meant by empathy conceptually. The extreme diversity in what the term empathy can refer to, and the

confusion and miscommunication it results in, can be reason to reconsider what empathy *should* mean. This will be further explored in the next chapter.

3. The need to revise the concept of empathy

Chapters 3 and 4 have been published as one paper as "Towards a clear and fair conceptualisation of empathy."(Bollen 2023). The paper text has been split into two chapters and mildly edited to benefit the readability and flow of this dissertation.

In the previous chapter, I mapped out the diversity in phenomena that empathy can refer to in autism research. This confusion alone can raise the question whether we should "pick" a meaning and stick to it, across disciplines and contexts, inside and outside academia. In addition, the previous chapter revealed some troubling trends in the measurement and conceptualisation of empathy related to autism. This adds an important ethical dimension to the ambiguity of what it means to empathise. In this chapter, I will explore this dimension and argue why the concept of empathy needs to be revised.

3.1. The power of the word *empathy*

The knowledge that we have and generate is shaped by the concepts we hold, how we understand them, and how we use them. Feminist scholarship has demonstrated how power inequalities can, through the exclusionary use and meaning of concepts, create and uphold said inequality, both in power and knowledge (Fricker 2007). This chapter will explore how this is the case for the concept of empathy and the exclusion of neurodivergence – particularly autism. Crucially, empathy is not merely academic jargon, and its colloquial understanding often differs from its meaning in academic context. In society, the concept is usually associated with virtue (Morris 2019). To illustrate, when someone we know calls us unempathetic, this is typically an insult, while the contrary, calling someone empathetic, is considered a compliment. Because of this normative connotation, the consequences of exclusion surrounding the knowledge generated about the concept is even more troublesome. As such, it is of utmost importance to rethink how we conceptualise empathy in research.

A reconceptualisation implies that there is a conceptualisation to begin with, one that needs revision. However, as extensively discussed in the previous chapter, there is a wide variety of ways in which empathy is being used and understood right now. While there seems to be an intuition about what empathy as a phenomenon is, there

is no consensus on how to exactly define it. As such, a number of different interpretations are currently in use in academia, in itself resulting in misunderstandings and confusion. This alone can be a motivation to rethink empathy. A conceptual revision aimed at resolving the descriptive and normative ambiguity surrounding the concept would benefit our progress in researching the concept, especially in an interdisciplinary and collaborative context (as most recently attempted by Eklund and Meranius (2021)). I will aim to do so as well, however, importantly, with the specific additional aim to correct for the injustice done to those who are currently unfairly excluded from the concept. Within the assortment of popular conceptualisations of empathy, there are some trends that, I argue, require reconsideration. Namely, some elements of these conceptualisations do not align with the moral normative connotation the concept holds in society, and additionally, some elements invite exclusive operationalisations (both will be expanded upon in more detail). These issues are by themselves troubling, but the combination of the two amplifies the concerns.

In the way empathy is being operationalised and measured, I have identified several issues to which I refer as *neurotypical gatekeeping* of the concept of empathy. Neurotypicality refers to the range of neurocognitive functioning that is considered "normal", as opposed to neurodivergent, which refers to all functioning outside of this range. As of recent, neurodiversity scholars have been pointing out how such implicit norms of neurocognitive functioning shape the way we think of concepts (Chapman 2020). Exposing such assumptions and rethinking their meaning is of special importance considering concepts that have normative connotations, such as empathy. Implicit assumptions about the relationship between expression and experience are abundantly present in empathy scholarship. However, such generalisations are unfair when applied to the neurodivergent. In several ways, this has biased our knowledge of empathy, especially regarding autism. There is a dominant narrative which holds that autistic people lack empathy. However, in fact, many first-person accounts and testimonies contradict the findings that autistic people lack empathy (see for example, Welch, Cameron et al. (2020), Hens and Langenberg (2018), Smith (2009)). Here are a few quotes to illustrate this:

> "Imagine being told you can't feel empathy, even though you feel people's emotions so much it bleeds into you" Vrana (2016) in Welch, Cameron et al. (2020)

> "He wrote that it is like there is *"a sequence written on the eyes of the other person that tells my brain and my emotions exactly how they should be feeling at that point. These feelings are inevitably always what that other person happens to be feeling"* (p. 54). McKean suggested that in autism, this capacity is *"a rather cruel practical joke of nature"* Smith (2009) on McKean (1994)

While there is a vast number of such examples, both recent ones and ones from decades ago, autistic empathic experiences keep getting overlooked or even invalidated. Stenning (2020) has explored the history of autistic testimonies on empathy, and how biased conceptualisations and assessment methods for empathy uphold a systemic underrepresentation of autistic empathy in scholarship on the concept to this day. I will go into how this comes about and what this means in practice in the section *methodological exclusion*.

An exclusionary use of the concept of empathy not only invalidates autistic empathy, but also sustains a harmful and stigmatising narrative of autism (Fletcher-Watson and Bird 2020). Because, in society, and also often in academia, being empathetic is seen as a desirable characteristic, important for being a moral agent, or even essential to being human (Decety and Cowell 2014). Noteworthy is that this normative connotation is being debated in philosophy, especially in relation to similarity bias and the role of empathy in dealing with otherness. A conceptualisation of empathy that accepts similarity bias as a property of empathy, does not align with the use of empathy as an ethical concept. Whereas empathy understood as overcoming similarity bias and better attending to alterity, would. So, whether it is fair to consider empathy a desirable trait or not (which it is colloquially and plays an important role in the stigmatisation of autism), highly depends on how one exactly understands it.

The role of similarity bias in empathy is striking in the context of neurodiversity. It can be particularly difficult for empathy to bridge neurocognitive differences, imagining what it is like to differ on such a fundamental level as processing stimuli and other information – in other words, overcoming "neuro-similarity bias". This particular challenge, as I've mentioned, is referred to as the double empathy problem (Milton 2012, Chown 2014), which refers to the notion that while autistic people may struggle to empathise with non-autistic people, the same goes vice versa. As I will further argue in this chapter, current conceptualisations overemphasise the difficulty autistic people face, while excusing those who are not autistic for not extending empathy to the autistic (see Chown, Hughes et al. (2020) for a striking example of this imbalance in empirical research). Paradoxically, concepts of empathy that unfairly favour neurotypicality hold back empathy from its potential as a moral concept, as it undermines the exact values that are typically associated with why empathy is related to morality in the first place (which I will expand upon in section 2).

This poses the question how to engage with the concept of empathy in research in a way that takes into consideration its normative connotation and impactful potential. In this chapter I will lay the foundation for an account of empathy to do so. In section one, I will expand on why a revision of empathy is so important and urgent. The normative and conceptual ambiguities and inconsistencies surrounding empathy will be further discussed, and I will demonstrate how this, combined with exclusive methodological practices, is creating problems I consider as an epistemic injustice (which I will define and clarify below), in the form of *neurotypical gatekeeping*. Then, I will argue why a revised understanding of empathy that responds to these issues should be an anti-discriminatory and normative one.

The need to revise the concept of empathy comprises two different but deeply related concerns: the ambiguity around the concept, and the exclusion of neurodivergence. I will start by sketching an overview of the conceptual differences that are present in empathy research, followed by a discussion of the ambiguous relation between empathy and morality. These discussions are necessary as the confusion is not only a problem in and of itself. Rather, an understanding of the landscape of what is meant by empathy, and why it should or shouldn't be related to morality, is needed before revising the concept. Then, I will reflect on methodologies used to measure empathy and how they not only further confuse the meaning of the concept but are often exclusive to neurotypicality. Lastly, I will explain how I identify this exclusion as an epistemic injustice.

3.2. Conceptual ambiguity

As discussed extensively in the previous chapter, empathy can refer to various different phenomena. This is in itself problematic as it makes it difficult to interpret and integrate works of different authors, specifically when working cross-disciplinarily. Fletcher-Watson and Bird (2020) called attention to how this confusion specifically impacts research on the link between autism and empathy. But more generally, the ambiguity of the concept leads to misunderstandings and holds back scientific and philosophical progress in this domain (Cuff, Brown et al. 2016). I will shortly recall the most salient areas of confusion, as found in the previous chapter, to sketch out the variety of what can be meant by using the word empathy.

- There is disagreement on the cognitive and/or affective nature of various aspects of empathy (Smith 2009, Aaltola 2014, Cuff, Brown et al. 2016, Fernandez and Zahavi 2020). There are multiple ways of demarcating

cognitive and affective empathy, based on, for example, the experience of empathy itself or the experience one empathises with. Empathy is sometimes understood as an emotion responding to another's emotion, or as a cognitive process of understanding the other's mind, or another combination of cognitive and affective states of a "self" and an "other".

- Another debated aspect of empathy is the strategy we use to get insight in the other's lived experience. Specifically whether this ought to be spontaneous or deliberate (Cuff, Brown et al. 2016). Often being conceptualised as spontaneous, automatic, or natural, this relates problematically to a similarity bias – as overcoming this bias, so empathising across differences (race, gender, neurotypes) can require more effort. Conceptualising empathy in this way recognises only in-group empathy as empathy, which does not align with the use of empathy as a something praiseworthy. This includes a neurosimilarity bias (Bollen 2023) and an often unquestioned asymmetry in the societal acceptance of empathic challenges from autistics to neurotypicals compared to the other way around (Milton 2012).
- Related to this, the role attributed to, and the importance placed on the ability to read facial expressions varies. The salience of this particular way of inferring the other's experience in both conceptualisations and operationalisations of empathy is noteworthy (for example Golan and Baron-Cohen (2006), Bons, van den Broek et al. (2013). As the reading of facial expressions can be more challenging for autistic people, the dominant emphasis on this strategy, and lack of openness to other mechanisms of attending to another's experience, are problematic, as will be expanded upon in the section "methodological exclusion".
- There is disagreement on the function of empathy; should it manifest certain behaviours, motivations, or "merely" create a connection (Cuff, Brown et al. 2016)? As touched upon in the introduction, depending on the definition of empathy one employs, the concept can fundamentally loose or gain moral relevance. For example, empathy is often understood as a psychological feature that has developed from its evolutionary benefit of enabling parent-child bonding and enjoying group protection. In this narrative, one often finds empathy to be inherently biased towards individuals belonging to the same social group, community, or family (Preston and De Waal 2002)). However, if one understands empathy as actually a way to overcome such social in-group biases and differences, considering a similarity bias as an intrinsic characteristic

of empathy does not make sense (and would actually be contradictive). As argued in the introduction, descriptively specific but normatively vague conceptualisations of empathy cause friction with the normative use of the concept in society.

- The role of self-other distinction is also a point on which conceptualisations of empathy tend to differ from each other (Cuff, Brown et al. 2016). And connected to this, the function of self-other distinction in the manifestation of empathy as concern for the other rather than distress in oneself is debated (Smith 2009, Pouw, Rieffe et al. 2013, Senland and Higgins-D'Alessandro 2013, De Coster, Wiersema et al. 2018).
- Lastly, there are different ways to conceptualise the importance of self-awareness and self-reflection for empathy (Robinson and Elliott 2019, Tordjman, Celume et al. 2019, Robinson 2020).

In Chapter 4, I will revisit these areas of disagreement on what empathy means and explicate how my own account of empathy relates to these debates in a manner that avoids the concerns I raise here. Crucially, as I will now go on to discuss, the ambiguity of the conceptual meaning of empathy confuses the deliberation on the moral relevance and normative potential of the concept.

3.3. Empathy and morality

While empathy is often held as being a good, beneficial, and morally important phenomenon, there is a complex debate surrounding the relationship between empathy and morality. This debate focuses, first of all, on whether empathy is in fact of moral import, and secondly, if it is, what the relationship between empathy and morality exactly entails (Aaltola 2014). A well-known opponent of the moral value of empathy is Jesse Prinz. He argues that empathy is not needed, or indeed detrimental for morality (Prinz 2011). His arguments for this view include the idea that empathy supports in-group bias and narrow considerations of out-group persons.[1] His stance has attracted quite some resistance. For example, Passos-Ferreira argues empathy to be quintessential to morality in its capacity of extending care to others and escaping egocentrism (Passos-Ferreira 2015). Similarly, Masto accepts empathy to be of moral

[1] Concern, he argues, has more basis for informing morality. However, the way he understands concern is similar to how many others understand empathy. And what he understands as empathy, others call emotion contagion and I call proximism (see later in Chapter 4).

import as a sometimes necessary motivator to do the right thing (Masto 2015). Morris points out that Prinz' arguments mainly point to the pitfalls of empathy if not executed properly, which actually emphasises the importance of extending empathy further than most of us do intuitively (Morris 2019). Prinz bases his arguments on psychological empirical findings and understands and accepts empathy to be what is found to be the experience of the average person, while others use a more idealistic notion of the concept. As such, I find a naturalistic fallacy in Prinz' concerns against the normative power of empathy as understood as the observed average human capacity for empathy (or lack thereof).

This discussion is ongoing, but the societal impact of empathy research and its association with moral agency is notable. If one accepts the dominantly held narrative that autistic people lack empathy *and* if one understands empathy as essential to morality, one might come to the conclusion that autistic people are inferior moral agents. This is at odds with experiences of autistic empathy and moral agency, suggesting the possibility for autism to be associated with exemplary morality (Jaarsma 2013, Stenning 2020)[2]. For example, a recurring theme in autistic testimonies regarding empathy and morality is a care for non-human animals and the environment, Stenning (2020) writes:

> The possibility of autistic concern for other species offers a chance to 'reverse' the assumption that cognitive empathy is essential to moral behaviour, and to turn the gaze towards what might be missing in 'neurotypical' morality (Stenning 2020)

Further exploring autistic versus neurotypical morality is out of the scope of this research, but the role theories of empathy play in the acknowledgement of the very possibility of autistic morality shows the significance of the need to revise the concept. Whether to include autistic people in our moral community or not has serious consequences, including exemption from both blameworthiness and praiseworthiness,

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[2] An interesting dimension to this discussion is that empirical research suggests that autistic people have a tendency towards consequentialist arguments, rather than deontological ones Gleichgerrcht, E., T. Torralva, A. Rattazzi, V. Marenco, M. Roca and F. Manes (2013). "Selective impairment of cognitive empathy for moral judgment in adults with high functioning autism." Social Cognitive and Affective Neuroscience **8**(7): 780-788.. Whether this observation is used as an argument in favour of or against autistic moral thinking, depends on the preferred normative framework of the author. See Richman, K. A. and R. Bidshahri (2018). "Autism, theory of mind, and the reactive attitudes." Bioethics **32**(1): 43-49. for an elaboration on how both theories of autism and theories of morality shape the inclusion of autistic people in our moral community, and the attribution of moral agency and responsibility.

as well as worthiness of being treated and respected as a moral agent (Richman and Bidshahri 2018). Aaltola (2014) defends autistic morality on the notion that only affective empathy is of moral importance, which, according to the empathy imbalance hypothesis (Smith 2009) is well-developed or even superior in autistic people. However, the separation between affective and cognitive empathy is also conceptually unclear, with different, often implicit, approaches being used (Chapter 2). Kennett advocates the possibility for autistic moral agency by proposing that empathy informs moral agents, not moral agency itself, in the sense that it is not a prerequisite (Kennett 2002).

To conclude, the role of empathy in morality is under debate. However, the dubious narrative that autistic people are inferior human beings *because* they lack empathy is, sadly, actively present in society – and it is used to support the dubious idea of prevention and "cure" of this way of being (Bovell 2020). This showcases how while debated in academia, the concept of empathy holds normative power in society.

3.4. Methodological exclusion

What contributes to the conceptual confusion surrounding empathy is that specifics in empathy assessment methods, the operationalisations of the concept, more clearly shape what is actually meant by empathy in empirical research, moving it further away from its moral dimension, while keeping this connotation (Chapter 2). Crucially, in the most popular conceptualisations of empathy, having an "appropriate response" to someone else's experience is included in the definition (Fletcher-Watson and Bird 2020). Consequently, most, if not all, methods to assess empathy are founded upon certain norms of behaviour, expression, and experiences. These norms dominate both what empathy should look like in the empathiser, how it should be expressed as well as what social stimuli should enable empathy, as will be explained in this section. This can be understood as a form of what has been introduced by the neurodiversity movement as "neurotypical domination". This refers to neurominorities (those whose neurocognitive functioning fall outside of what is considered normal) being marginalised and oppressed by the systematic favouring of behaviours and experiences that are considered neurotypical (the "normal range" of neurocognitive functioning) (Chapman 2020). This can be seen in the often implicit, rarely contested, assumptions made in research operationalisations of empathy.

> "Body Language 101 is the importance of mirroring your subject's posture or body language as a show of empathy and means of establishing connection. So, if you have a clinical suckage at doing that very thing… maybe that's where some of the 'autistic people have no empathy' thing comes from" Aspergia (2012) in Welch, Cameron et al. (2020)

In terms of how empathy should be expressed, social norms influence research methodology when empathy is operationalised as a specific set of responses to social and emotional stimuli. Responses that are considered to be "appropriate" are then used as measures for empathy, such as which facial expressions ought to be made or which things ought to be said. However, appropriateness is subject to the personal, emotional, social and cultural context, which is rarely reflected upon in the context of empathy assessment in research settings (Harrison, Brownlow et al. 2020). As such, these methods do not allow for diversity in how to express empathy. They rather assess how one fits into a predefined behavioural norm – representing the majority or dominant group. Other ways in which norms on the expression of empathy influence research methodology concern quantitative measures such as physiological responses (heart rate, skin conductance) and neurological activity. Such measures might seem to be less objectionable in this context because of their quantitative and objective nature, but if used in the context of operationalising a value-laden phenomenon such as empathy, such physiological characteristics suddenly are awarded with normative power. For example, applying results of studies exploring the neural underpinnings of empathy and empathic differences (for example (Klapwijk, Aghajani et al. 2016, Lassalle, Zurcher et al. 2018, Stroth, Paye et al. 2019)[3] to individuals and their empathic capacities, and capacities as a moral agent, oversimplifies and overlooks the complexity of contextualised social and moral behaviour in a reductionist manner.

Furthermore, norms on expression and behaviour shape stimuli used in empathy assessments. For example, one common qualitative way to measure empathy is through exercises on reading facial expressions, or interpreting scenarios, stories or movie clips. However, the diversity of expression and behaviour that exists in society is usually not represented in these scenarios. Assumptions are made on what expressive content underlies the verbal and non-verbal cues present in the stimuli – and as such, they enforce norms on the relationship between experience and expression. Giving the "right" answer means recognising and translating cues in a certain way, a way that represents a social majority, for example, reading typical facial expressions.

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[3] Important note: the authors of these examples do not explicitly associate their results with moral agency. However, as argued before, the notion of empathy deficits often is associated with moral deficits, both by some academics and in colloquial understanding.

These methodologies all concern what is typically referred to as "state empathy"; assessing the response to a certain stimulus. Trait empathy assessments, by contrast, aim to evaluate empathic capacity independent of certain stimuli, for example, through interviews or questionnaires. Strikingly, a recent systematic review on a variety of self-report questionnaires on empathy used in autism research found that both evidence for content validity (whether these assessments actually measure what they claim to do) and measurement invariance (whether they assess the same in autistic individuals as in a neurotypical sample) are lacking in all the most well-known trait-empathy questionnaires (Harrison, Brownlow et al. 2020). Furthermore, the review concluded that the questionnaires were highly culturally specific, nonliteral, and vague. For this reason, it is unlikely that measurement invariance can be assumed when using these methods in a neurodiverse group. To top it off, the most popular empathy questionnaire – the empathy quotient – was "validated" partially by showing that an autistic sample had a lower score on this questionnaire (Baron-Cohen and Wheelwright 2004); and now it is often used to show autistic people have diminished empathic capacities. This is circular reasoning. Potentially, these tests could be a method to test for autism, or one's skill and sensibility in adhering to social conventions in their specific cultural context. But as a measure for empathy, this questionnaire fails to reliably assess what it aims to (Harrison, Brownlow et al. 2020).

3.5. Neurotypical gatekeeping of empathy

Because of these conceptual and methodological confusions in academic research, the knowledge that is being generated on empathy is biased in favour of neurotypicality. Both who is considered to be empathetic and who deserves empathy is exclusive to specific behaviours and neurocognitive characteristics. As a result, this state of affairs can be understood as, what I call, neurotypical gatekeeping of the concept of empathy.

I recognise this phenomenon as an epistemic injustice – a concept referring to the idea that we can be harmed as knowers, as introduced by Fricker (2007). This, because of the way biased understandings of empathy shape *what we know* of empathy, *how we get to know* things about empathy, and *who gets to know* something about empathy, as I will further argue and explain in this section. The two types that epistemic injustice is typically divided into – hermeneutical and testimonial injustice – are both at stake with regards to how empathy as a concept is being understood and attributed to people, and crucially, these types reinforce each other. *Hermeneutical injustice* relates to the accessibility and/or inaccessibility of the concepts by which we understand the world.

When these are founded upon certain privileges, the result is that some experiences/ perspectives cannot be understood or reflected upon using these concepts. With regards to empathy, this applies as it is operationalised upon neurotypical norms of communication and self-expression, leaving little room for autistic people to use the concept of empathy to understand and assess their own autistic (or otherwise neurodivergent) empathic experiences. This not only harms this minority as knowers and users of the concept of empathy, but it limits everyone in our knowledge of empathy. *Testimonial injustice* refers to knowledge held by certain individuals/groups not being heard, respected or taken seriously because of their social identity. As argued by Stenning (2020), autistic empathic experiences are systematically being excluded from informing the academic knowledge about the concept. This is partly because of the exhaustion of a narrow and exclusive notion of empathy and corresponding methods (hermeneutic injustice), but also by invalidation and erasure of testimonial evidence of neurodivergent empathy (testimonial injustice). She offers examples where the dogmatic conviction that autism and empathy do not go together have made researchers question either the empathic experience or the autism diagnosis, because the existence of autistic empathy is omitted from the realm of possibilities. She refers to this phenomenon as "the self-fulfilling prophecy of the neurotypical gaze on an autistic subject". This clearly demonstrates how testimonial and hermeneutic injustice are deeply intertwined here and reinforce each other. Stenning argues for the importance of starting to let autistic life-writing inform our understanding of empathy and its relation to morality and neurodivergence, as for example done by Welch, Cameron et al. (2020). This move is also referred to as the empathic turn in relation to autism, in which, for example, technologies that allow non-speaking individuals to give their unique testimonial input as well can play a vital role (van Grunsven and Roeser 2021).

3.6. Conclusion

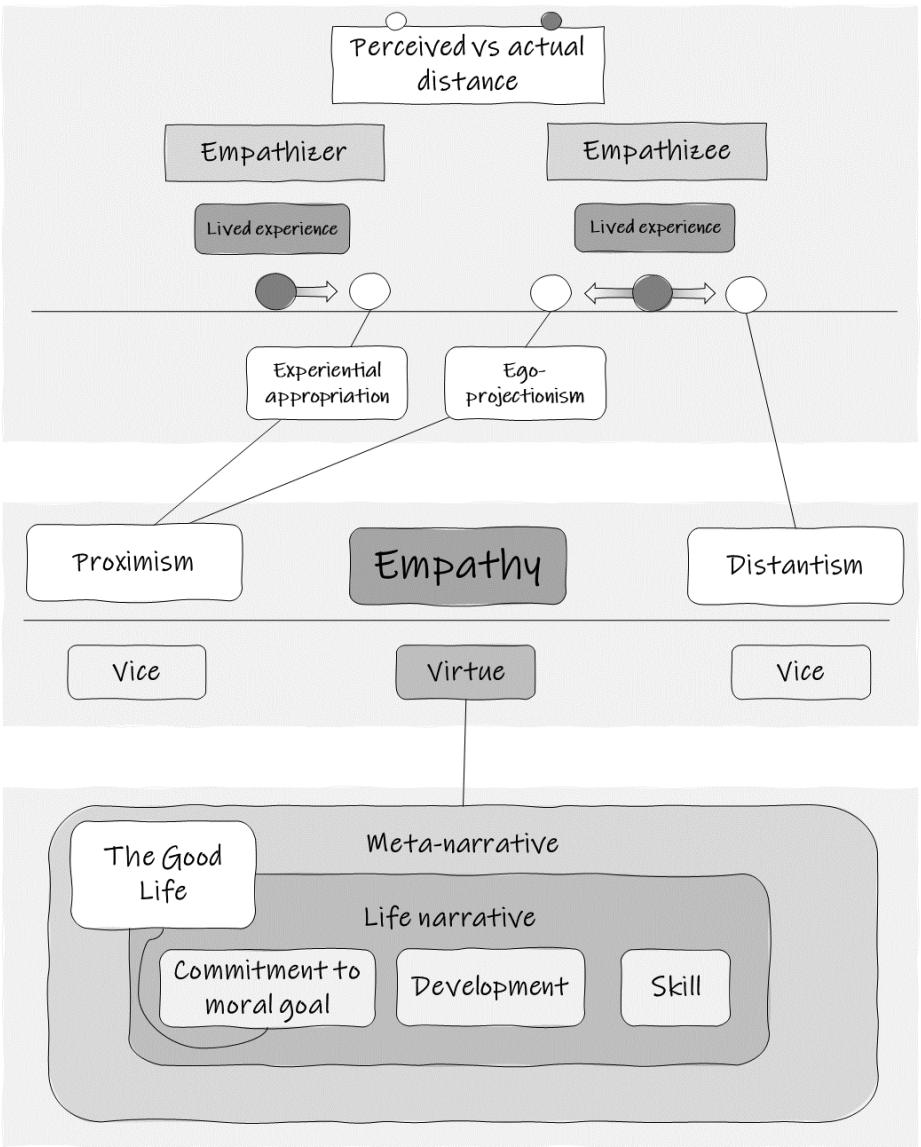
To summarise, while there is an academic debate on whether and how empathy is related to morality, in society the concept is generally valued (Morris 2019). Meanwhile, there is a complex conceptual confusion, leading to misunderstandings, incongruences and misinterpretations of research findings – stagnating academic progress in the understanding of empathy. Some elements of popular academic conceptualisations of empathy are at odds with its normative societal use and power and invite problematic exclusive operationalisations. These elements include

spontaneity or lack of effort as a feature of empathy, which conflicts with praiseworthy efforts to overcome similarity bias; the inclusion of "appropriate" responses as an essential part of empathy, inviting limiting behaviourism in operationalisations; and a commitment to specific mechanisms such as interpreting facial expressions, not leaving enough room for diversity in ways in which we can be empathetic. Furthermore, due to systematic methodological and epistemic exclusion, the concept is being withheld from neurominorities, a process I have referred to as neurotypical gatekeeping. As empathy is often suggested to be fundamental in our social world and at the essence of being human, it is all the more important to reflect on the injustice done to those who are being excluded a priori from the very concept of empathy.

I will argue that, to resolve these issues, a revision of empathy is needed by means of an anti-discriminatory approach. With anti-discriminatory I mean that while some people are more empathic than others, this should be evaluated only on directly relevant factors, and a concept of empathy should not invite or afford operationalisations that confuse this and are unfairly exclusive. What then should be relevant factors for what is empathy (and what is not), is the main question here. Furthermore, I argue that a concept of empathy should be explicitly normative so as to align it with the normative significance of how it is used. The problems caused by inconsistency and misunderstandings surrounding empathy could be solved by simply deciding upon one account and sticking to it (conceptually, methodologically and normatively). However, I also want to respond to the undesired social impact of empathy research, in a society where this concept is valued. This comes down to a mismatch between research conceptualisations and operationalisations and how empathy is understood colloquially. To resolve this misalignment, one could adjust to the other. So, either A) academics could use a conceptualisation of empathy that matches its connotation in society or B) society as a whole could change the intuition that empathy is valuable, accepting an operationalisation according to which empathy is morally irrelevant or even anti-moral (as, for example, argued for by Prinz (2011)). In principle, both options would work to resolve this mismatch (see Jorem and Löhr (2022) for a general argument of the following approach to conceptual engineering). However, the issues at hand do not only exist on an abstract and theoretical level, but concern real-life problems that require urgent attention. It is a priority to adequately respond to the consequences of this conceptual confusion and exclusion. Therefore, from a pragmatic perspective, I reason in favour of option A for this specific case. I argue that we need to settle the dispute on empathy and morality by accepting the value associated with empathy in society, and use a fair normative conceptualisation

accordingly, which would in turn resolve disputes on conceptual specifics. Thus, my aim for the next chapter is to sketch out a foundation for such an account.

Part II: A proposal for empathy



4. Towards a clear and fair conceptualisation of empathy

Chapters 3 and 4 have been published as one paper as "Towards a clear and fair conceptualisation of empathy."(Bollen 2023). The paper text has been split into two chapters and mildly edited to benefit the readability and flow of this dissertation.

The chapters in Part I demonstrated the multilayered confusion about what phenomenon empathy refers to. Additionally, I raised concerns about epistemic injustice related to empathy and autism, to which I referred as the *neurotypical gatekeeping* of empathy. That is why, at the end of Chapter 3, I argue for the need to revise the concept of empathy and conceptualise it in a way that is clear and fair. In Part II, I will develop such an account of empathy. In this chapter, I will lay the foundation for this account.

4.1. A proposal for an anti-discriminatory and normative notion or empathy

4.1.1. Boundary conditions

I will start my proposal by exploring some terms and conditions for an anti-discriminatory and normative account of empathy. As discussed in Chapter 3, I argue that we ought to use the concept of empathy in a normative way, that is, I argue that we need to align the concept of empathy as understood in academia with its colloquial use, to respond to the societal impact of how empathy is talked about in academia, by adopting a concept of empathy that is associated with virtue. As discussed in the previous section, conceptualisations of empathy that include in-group bias and exclusivity are not suitable in this regard. As many conceptualisations and methodological operationalisations of empathy tend to undermine the values of diversity and inclusivity, an account of empathy that justly connects it to morality, contrastingly, needs to embed these values.

While empathy can mean a variety of things, the proposal needs to be in line with the common core found in existing conceptualisations of empathy for it to be intuitive and practical. I propose that the array of definitions that I discussed in Chapter 2 agree with each other on the following: empathy refers to a relational process that connects

the inner lives of different individuals. This is the only statement I expect all studying empathy would agree upon (i.e. any attempt to further specify this sentence will likely point at an area of disagreement about the concept). Some understandings of empathy in the academic literature stay at this general level, others provide a detailed model clarifying which intra- and interpersonal processes are included and which are excluded in their definition of empathy. However, each mention of empathy faces the following issue: how can one access or yet catch a glimpse of someone else's inner life? Despite all conceptual ambiguities, empathy is considered to be an experience related to another's experience. On that note, it has the potential to support, or even be at the heart of, a diverse and inclusive society. Empathy could be seen as a bridge connecting our experiences, overcoming individualism. Some authors hold this to be the sole objective of empathy (rather than the objective being to support or facilitate certain moral/prosocial behaviours). Between conceptualisations that are founded upon this objective, I found an interesting dichotomy, seemingly paradoxical. On the one hand, this interpersonal bridge can be built upon identification with the other, appreciating the similarities you share (for example Komeda, Kosaka et al. (2015)). On the other hand, it involves recognising and appreciating the differences between you and the other (for example Jurecic (2006)). These contrasting aspects are both important and valuable, if applied appropriately (Taipale 2014). If taken to an extreme, both processes are problematic. This can be understood as two vices between which a virtue balances.[4]

4.1.2. Understanding empathy as the balance between proximism and distantism

I propose to understand empathy as *appropriately attending to experiential differences and similarities between the self and other*. This definition combines the two intuitions about empathy that are both common – while seemingly opposing – as described above. Namely: 1. Identifying yourself with the other, creating a bridge between two life worlds, sharing experiences, and 2. Perspective taking, acknowledging that the other has a different experience from yours, and trying to make sense of the other's life world. If taken to an extreme, both of these phenomena can be harmful, which I will term *distantism* and *proximism*. Distantism and proximism refer to a person disregarding

[4] I will expand more on this virtue-vice structure, and how empathy could be conceptualised as a virtue, in Chapter 5.

similarities (distantism) and differences (proximism) between themselves and the other, respectively. Empathy, then, can be understood as the balance between the two.

Proximism is failing to have a proper self-other distinction, considering the experiences of self and other to be closer to each other than they are. This can happen either by placing another's experience too close to one's own, or by placing one's own experience inappropriately close to the other's (or a combination of both). I refer to these inclinations as *ego-projectionism* and *experiential appropriation* respectively. Ego-projectionism refers to the tendency to believe that someone else has the same experience as you. Consider the following example. Frieda hears Jamie's favourite song, which she in fact doesn't like so much, on the radio, and turns up the volume. Jamie runs away and slams the door. Frieda feels irritated, because she thought she was doing a nice, considerate, and actually empathetic thing. She would have started dancing happily if Jamie did the same thing for her. The volume, however, was painful for Jamie, which is why he quickly ran away to escape from the sound. Frieda is, in this case, failing to understand that Jamie experiences something different when hearing the loud music than she would. Experiential appropriation, on the other hand, can be understood as projecting the experience of the other onto oneself. This happens, for example, when internalising the suffering of another, what is sometimes colloquially interpreted as being "too empathetic". Experiential appropriation has also been brought to the fore as a risk of "empathy" in the context of racism and sexism – despite the good intentions that often underlie the attempt to empathise with a marginalised group from a position of privilege (Davis 2004).

The opposite of proximism is distantism; failing to see one's similarities to the other. In an extreme form, this means dehumanising another, disregarding the most basic level at which one could identify with the other: being human[5]. Distantism can also, in a less extreme but still harmful form, entail reducing someone to a certain characteristic, diagnosis, or status, omitting the richness of someone's inner life world. While Frieda very much dislikes oranges, it would be inappropriate for her to feel bad for Jamie while they were eating an orange – which she would do if she assumed an orange tastes the same to them as it does to her. On the other hand, they both share what it is like to experience a nice taste, both being human tasters (of course, assuming here, they both have typical taste perception) – so it would also be inappropriate to be apathetic towards their pleasant sensation. If empathy is about both similarities and differences between each other's life worlds in interpersonal interaction, it would,

[5] Or, when interacting with a non-human animal, failing to connect on both being, for example, a mammal, an animal, a sentient being or simply alive.

applied to this case, be best to acknowledge their differences in the taste sensation they perceive from eating oranges, while connecting upon their similarities on what it is like to eat something that tastes good.

Empathy, I propose, then, is the careful balance between distantism and proximism[6]. One needs to be an ego-projectionist to some extent. Having to ask everyone everything without making any assumptions that their experience might be similar to yours is highly unpractical (it is safe to assume that if you hit someone the other will feel pain, as you would). Moderated experiential appropriation is of value as well, as it helps to understand another's perspective to feel with them and place oneself in the other's shoes. While these aspects are often included in accounts of empathy (simulation, perspective taking, emotion contagion etc.), the next one is rarely acknowledged. Namely, that appropriate distantism puts some humility in the mix, knowing what you don't know about the other's experience, what you can't ever know, but what you nevertheless try to take into account.

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[6] One may wonder why I distinguish two subtypes of proximism, while I don't do the same for distantism. Proximism occurs when an experience that is actually only held by only one of the subjects is wrongly perceived as a shared experience:

Proximism: E(self or other) -> E(self and other) with E(x) = an experience held by x and -> = is mistaken for

The actual experience can be one of the self or the other – projected on the one whose it is not:

Ego-projectionism: E(self) -> E(self and other)
Experiential appropriation: E(other) -> E(self and other)

Both of these forms of proximism can be present at the same time as well, but it makes sense to conceptually distinguish the two as projections in different directions. These two concepts give us epistemic tools to refer to and talk about nuances in manifestations of proximism and they correlate to slightly different moral pitfalls related to empathy. With distantism, a shared experience is overlooked:

Distantism: E(self and other) -> E(self)

It is unclear whether it would be useful or even sensical to introduce different concepts to distinguish in what direction that shared experience is overlooked. In theory, a second form of distantism could refer to a shared experience mistaken for an experience only held by the other:

? E(self and other) -> E(other)

However, in that case one would remove one's own experience from oneself, a type of delusion which is, I suppose, out of scope for a conceptualisation of empathy. So, for now, I don't see a reason to include a subdivision of distantism and unnecessarily complicate the framework.

Proposed definitions	
Empathy	"Appropriately attend to experiential differences and similarities between the self and other. Balancing between proximism and distantism."
Proximism	"Mistakenly disregarding experiential differences."
Ego-projectionism	"A form of proximism. Extending your experiences to another."
Experiential appropriation	"A form of proximism. Extending another's experiences to oneself."
Distantism	"Mistakenly disregarding experiential similarities."

To develop and refine this as a virtue, one needs to learn from experiences of diverse interactions; some with people who are more like you, and some with people with strongly different experiences. A virtue is understood here not as a static capacity, skill or characteristic, but as a dynamic equilibrium. To borrow a metaphor from chemistry; a virtue is like a buffer. A buffer solution manages to keep its pH stable even when a strong acid or base is added to it – a virtuous person manages to resist to fall for one of the vices the virtue lies in between, even when the situation poses a challenge by making one of the vices even more tempting. For example, when interacting with someone with whom there appear to be more substantial differences than you are used to, it might be difficult to connect on the similarities that there are (at the very least being human), while not inappropriately using projection.

4.2. Clarifying conceptual ambiguities

As mentioned in the beginning of the chapter, conceptualisations of empathy diverge in many aspects. In the previous section I proposed to adopt a notion of empathy as appropriately attending to both experiential differences and similarities between the self and other. In this section, I will expound my proposed conceptualisation of empathy and its relation to other conceptualisations of empathy, as discussed in section 3.2, by clarifying my position on areas in which different conceptualisations of empathy tend to deviate.

4.2.1. The cognitive versus affective nature of empathy

Scrutinising the duality between affect and cognition is out of scope for this chapter. I avoid this distinction with the use of "experience", because of the following concern I

have in this domain. In practice, what is considered to be an emotion or thought and how this distinction is made in research operationalisation is again, often based on a narrow neurotypical dominated idea of how to experience and express these states and their differences. For example, by reducing the experience of an emotion to it being expressed by a certain facial expression. With the use of "experience" I aim to avoid such misunderstandings. This notion is used here to include the diverse ways to experience emotions, sensations, thoughts, beliefs and perspectives and acknowledge this variety in the manifestation of empathy.

4.2.2. Empathy as spontaneous or an effort

In my approach to empathy, the effort (or lack thereof) put in empathy is not a requirement for it to be called empathy. The effort required for empathy depends not only on the person (and to what extent this person developed the virtue of empathy), but also on the specific relationship with/to the other subject. If you don't know the other very well, or when encountering someone who differs from you more or in different ways than other interactions you've had had, more effort might be required to find this balance, and not fall into the "traps" of ego-projectionism, experiential appropriation or distantism. These situations raise an empathic challenge, and, with this, an opportunity to strengthen the virtue. When connecting with individuals who are familiar or have a lot in common with you or with other individuals you've known (but not so much that it creates another empathic challenge: dealing with an unknown level of similarity), accommodating this balance might be effortless.

4.2.3. The status of (facial) emotion recognition in empathy

While some understand facial emotion recognition as essential to empathy, or even constitutive of what empathy is, this is one of the aspects that narrows down the concept and makes it unnecessarily exclusive. In most circumstances, the skill to recognise and identify emotions as typically expressed in facial movements or behaviour is very informative to get insight in the other's experience – as a source of information about the other's experiences. However, it is also important to recognise when not to rely on this skill – as it is attuned to behaviour and expressions of the majority in the sociocultural context one is situated in. When interacting with someone who expresses their experience in a different manner (so for example in the case of neurodivergence, but also in cross-cultural communication), this requires a different

way of translating behavioural cues into the underlying expressive content – as only the latter is informative and relevant to empathy.

4.2.4. The function of empathy and the place of similarity bias

In my account, the function of empathy is to appropriately navigate differences and similarities in our lived experiences. Not attending to either experiential similarities or differences, involves a disregard of either aspects you share or aspects you do not, and in result disrespecting part of the other's subjectivity. Consequently, my understanding of empathy does not include similarity bias as one of its characteristics. On the contrary, empathy should help one to overcome their biases in approaching another. It might indeed be easier to empathise when there is more similarity, especially if one is used to relying on projection. However, if one often fails to empathise with someone whose experiences are more different, this is a feature of the empathic ability of the person (having room for improvement) rather than a characteristic of empathy itself.

4.2.5. The role of self-other distinction

In various conceptualisations of empathy, having proper self-other distinction, i.e. being aware that the experience of the other is not the same as yours, is an essential part of empathy. In some conceptualisations this is defined in an even more specific way, namely as being aware of the causal relationship between the other's experience and yours. So, for example, recognising that when you feel sad when the other expresses sadness, your sadness is a response to the other. The other's sadness is not yours. Both of these uses of self-other distinction play an essential role in my account, as they correspond to preventing the two aspects of proximism: ego-projectionism and experiential appropriation, respectively.

4.2.6. The manifestation of empathy as concern

Both the idea that empathy manifests as a certain emotion, e.g. concern, as well as the idea that empathy manifests in specific socially desirable behaviours or expressions are not included in my definition of empathy. Empathy's role in bridging between different life worlds has an intrinsic value in a diverse society, not only an instrumental one to promote certain behaviour. Furthermore, requiring empathy to manifest in a certain way would inevitably result again in an exclusive definition of the term, failing to consider the immensity of the variation in individuals, situations and relationships.

For example, while offering help might often be a desired result of empathy, one could successfully empathise with a serial killer without condoning their behaviour.

4.2.7. The role of self-awareness in empathy

The importance of being aware of one's own experience, and how this relates to the other, is frequently brought up in relation to one's ability to empathise. This aligns with the concept of empathy as proposed here, meaning that without having any sense of one's own experiences, one cannot relate it to the other's in terms of differences and similarities. However, self-awareness is meant here in a broad sense, not exclusively in a cognitive and/or reflective manner. The ability to label one's emotions or put experiences into words might be helpful, but not being able to do this does not imply that one does not have a sense of one's own experience. And consequently, it does not necessarily prohibit one from relating that experience to another's (similar to the role of being skilled in reading facial emotion expressions). To further improve and refine one's empathic ability, some self-reflection on one's limitations and tendencies towards proximism or distantism, is needed. But also here, it is important to be wary of limiting what is considered and recognised as reflection (for example by holding an exclusively cognitivist/intellectualist understanding of reflection).

4.3. Implications

I have argued that, to responsibly engage with the concept of empathy in research, an anti-discriminatory notion of empathy is needed. I have made a proposal to understand *empathy as appropriately attending to experiential differences and similarities between the self and other.* This entails working on a balance between proximism (ego-projectionism or experiential appropriation) and distantism. Adopting this approach to empathy has several conceptual and methodological implications, which I will discuss here.

4.3.1. Conceptual implications

It might seem like this account of empathy includes a big move away from most well-known definitions of empathy, especially ones used in cognitive and social science[7]. However, applied to practice, it will often lead to the same conclusions about "this is empathy" and "this is not". This will mainly be the case when considering interactions between people who belong to the same group or share many characteristics as such. The latter is because most accounts of empathy tend to disregard the pitfalls of proximism, or even favour proximistic tendencies (for example when empathy is understood as emotion-contagion, simulation, or "tuning in" to the other's experience). This is less of an issue in intra-community interactions. When experiential differences are relatively small, the extrapolation of experiences does not have to lead to any trouble. Though, applied to cross-neurotype interactions or other situations with relatively big experiential gaps to bridge (for example cross-cultural interactions), the same strategy appears to be, what I call, proximism. Consider, for example, someone with a perfect EQ score who fails to empathise with their autistic son. Their ego-projectionist tendency is suddenly exposed by the cross-neurotype interaction. According to many operationalisations of empathy, this person would not to be considered less empathetic – as their son falls out of the norm of who one is supposed to empathise with. In contrast, for the son a similar ego-projectionist tendency would be considered a lack of empathy. What would not be considered empathy by others because of atypical expression, effort required, or strategies used, would be appreciated as empathy in my account.

As each interaction, context and situation comes with a unique set of experiential differences and similarities, empathy can take many forms in terms of its manifestation in behaviour, emotions, expressions etc. My proposed conceptualisation of empathy acknowledges and accommodates this immense diversity. There are no requirements on output (what empathy should look like), input (what is needed to enable empathy in another) or whether it should or should not require effort. As a result, this notion of empathy is free from the exclusive, privileged and discriminatory (implicit) characteristics and effects of most other conceptualisations. This does not mean that "anything goes". On the contrary, the only requirement there – the balance between distantism and proximism – is a very stringent one. Considering the diversity in

[7] How large of a move it seems of course depends on the conceptualisation of empathy one was used to, and this may depend on the specific field. For some, this conceptualisation might be closer to a wider or different notion such as social cognition, while for others, it might already by quite in line with how one understood empathy.

people, relationships, experiences and contexts, the absence of other conceptual restraints facilitates the variety of shapes and forms empathy *has* to take on to *actually* fulfil this *one* requirement. So, while this concept of empathy may seem wider because it is neutral about the mechanisms used to empathise, it is more precise in its normative dimension and moral demands[8].

Adopting this notion of empathy is not only of applied ethical import (considering the epistemic injustice done to those who are currently being excluded from it), but also of importance on a moral theoretical level. Unjustified narrow understandings of empathy rob the concept of its normative potential. By understanding empathy in the way I propose, and including *only* that as a conceptual requirement, empathy has a normative power that actually meets the positive connotation it intuitively enjoys. Appropriately attending experiential differences and similarities between the self and other, empathy, is in itself of moral significance (this will be expanded upon in Chapter 5). Additionally, some examples of empathy's instrumental value are improving communication in relationships, promoting prosocial behaviour that is *actually* appropriate to the unique person and situation, and facilitating a nonviolent diverse society/community.

An important topic in the debate around the moral import of empathy concerns its relation to the expression of care. In my account of empathy, empathy supports this in the following way. Someone with proximistic tendencies may care very deeply about others, but in lacking the ability to recognise the difference in how others experience things compared to them, they may fail to properly act upon their feeling of care, in truly anticipating the other's needs. On the other hand, a distantist might also care deeply about, for example, their disabled child, while failing to respect the child as being fully human, with a deeply meaningful and interesting inner life.

Lastly, similarly to letting go of too narrow notions of what empathy looks like, we need to reconsider the strategies, mechanisms and processes that are supposed to be needed and used by someone in order to empathise. On the one hand, we need to address the limits of mechanisms often included in conceptualisations of empathy (Zahavi 2010). For example, simulation, a common way of cashing out empathy, is limited in its danger for ego-projectionism (lack of humility/awareness of what is the unknown), as well as the risk of experiential appropriation (confuse the simulated experience for one's own, and adopt it). Theorising about the other's mind (typically considered a more "cognitive" approach to empathy, opposed to the "affective"

[8] Which makes it more specific than some notions of social cognition or mindreading

nature of simulation) puts one at risk not only for ego-projectionism, but also for distantism (stereotyping, tokenisation, objectification). The skill to read facial emotion expressions and other emotional cues has its limits as well. As this skill is most often attuned to the expressive norms in a specific sociocultural context, one cannot rely on this entirely when it comes to interacting with an individual person (similar to the limits of applying a statistic to an individual case). On the other hand, we need to assess which strategies to make sense of another's experiences are currently not considered, underrepresented, neglected, or marginalised. Specifying which mechanisms and processes are considered to be useful to or even part of empathy, is, again, unnecessarily exclusive. It does justice to neither human diversity, nor human creativity. Moreover, it creates the false illusion that the included strategies are actually sufficient. On the contrary, we need to accept that the experience of another will never be fully accessible to us – and therefore, neither is perfectly assessing nor dealing with experiential differences and similarities. As a result, no one can ever be flawlessly empathetic. This is important to make explicit. Neurotypical empathy is currently used in a normative way in research, clinical and pedagogical practice, e.g. finding ways to make those who diverge from this norm reach *this* goal is a priority. Instead, we should accept this "norm" as a mere average, while perfect (even though unreachable) empathy should be the thing to strive for. This would do more justice to those who are currently excluded from the concept, while humbling and challenging those who are currently being excused from further developing empathy, namely those who already fit into the "norm".

4.3.2. Methodological implications

Changing how empathy is understood as a concept, should be accompanied with appropriate methodological shifts. After all, many of the problems that occur with other conceptualisations have to do with the corresponding methodologies, as discussed in the previous chapters. Most methods that are currently being used to measure empathy are either measures for neurodivergence or social literacy (in that specific sociocultural environment). This does not undermine the value of these methods, only the conclusions drawn about empathy based on studies using these methods. For example, those experiments demonstrating similarity bias (as discussed by Bloom (2017)), point out the limited empathic capacity of the average person, rather than the limited moral capacity of empathy. Similarly, low scores on the EQ or IRI questionnaires, indicate challenges in (British) social literacy. Social literacy is attuned to the majority, as they simply make up most of the social environment. One

can have challenges in this area, and benefit from therapy or other interventions to improve these skills. However, these skills do not have the same moral connotation as empathy and should therefore not be confused with it. It often is, which exactly leads to the issues described before, including stigmatisation or even dehumanisation of neurodivergent individuals, as well as the excusing of those who excel in social literacy from developing actual empathy (for example, towards neurodivergent individuals). Oddly, many methods are linked to the amount of effort needed and challenges faced in social situations where empathy is required. As empathy will always be a challenge, as discussed before, absence of the experience of challenge could actually be a sign of shortcomings in self-reflection in this regard, and, actually, lack of empathy. It could also relate to living in a homogenous social environment. The concept of empathy proposed here challenges some of the research currently being done on what is called "empathy". Given the moral connotation and societal implication of the notion of empathy, one should be careful with using term empathy when actually studying specific skills or mechanisms.

In light of this we must ask, then, which measures are appropriate to assess empathy? As mentioned before, empathy is a relational concept, not an individual one. Another subject's experience to empathise with is essential. It is only then that there are experiential differences and similarities between a self and an other – unique to the subjects and context. As a result, empathy does not exist in isolation. That being said, some individuals have developed empathy further than others. Due to the complexity of social interactions and the phenomenon of empathy, quantitative measures cannot suffice. They require oversimplifications that inevitably lead to, again, exclusion and bias. Engaging with a moral concept in a research setting comes with a lot of responsibility, and should be done extremely carefully, mindfully and critically. If done at all, more suitable qualitative measures designed with utmost critical reflection and creativity should be considered, including explicit discussion of all limitations of the methods and, even more importantly, of the results (in research dissemination). To assess empathy in a conversation, for example, one could perform a discourse analysis looking for signs of critical reflection on experiential differences and similarities, humility in this regard, and responsiveness to signs of proximism and distantism. But then, from such an experiment, one can only draw conclusions within all the limitations of the research setting, the analytic framework, and the biases, privileges, and blind spots of the research team itself.

4.3.3. Application to autism research

Empathy plays a central role in various theories of autism, diagnosis, research, interventions and societal narratives. Adopting the conceptualisation of empathy defended here would have strong implications for autism research and its societal impact, as the concept of empathy is currently most often founded upon neurotypical norms and studied with exclusive measures. Most issues could be solved by using terminology more carefully: taking caution of when the term empathy is actually appropriate, and when it is not. A significant problem arises when neurotypicality is mistaken for virtue (not necessarily by the researchers themselves, but in the societal narrative) – which occurs when misusing a value-laden term like empathy. The body of research done on autism and empathy strongly indicates that there are differences between neurotypical and autistic experiences and expressions of what is called empathy. Understanding these differences can be very valuable, if used, interpreted, and framed appropriately. Next to changing the vocabulary, compensating the overrepresentation of neurotypical behaviour, experiences, and expressions, and the prescriptive use of those, would make the knowledge generated on empathy less exclusive and, in fact, more empathic itself[9].

The question arises whether there are differences between autistic people and neurotypical people in possessing and developing empathy[10]. The use of the concept empathy in the notion of the double empathy problem is in line with the one proposed here. It states that empathy between different neurotypes is challenging - for autistic people to empathise with neurotypicals and vice versa (Milton 2012). Because autistic people are a minority, their challenges to empathise (with the majority) are more apparent. Additionally, developing and practicing "easier" empathy (with people of the same neurotype) is made harder as well, since, as a minority, they have less access to interactions with their peers than neurotypicals (Chown 2014). In parallel, opportunities for development of empathy towards autistic experiences are scarce for neurotypicals - as are societal encouragements to do so. Since neurotypicality is the norm, not being able to empathise with neurodivergent groups is excused – while the other way around is seen as a deficit[11]. Both should be considered as equally normal

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9 This would also require neurotypical researchers to overcome some empathic challenges they may have themselves.

10 Considering its normative implications, a different but important question to ask is whether this is desirable to study in the first place.

11 This double standard is reinforced by most empathy assessments as they are solely based on empathy towards neurotypicality – as discussed in the beginning of this chapter.

deficit: it is just a matter of a person being a human who has to develop and refine empathy. Tendencies towards proximism as well as distantism towards autism are present in society. For example, ego-projectionism underlies the expectation and demand put on neurodivergent individuals to mask – to pretend to be/to act neurotypical. Without the confusion of neurotypical ego-projectionism, masking wouldn't be needed. On the contrary, distantism occurs when individuals are infantilised, stigmatised, or even dehumanised. Rather than focusing on empathy on an individual level, research on empathy in inter-neurotype interaction, and factors that can facilitate or disturb this, is needed.

4.4. Conclusion

Adopting an anti-discriminatory notion of empathy would remedy the undesired impact of research that uses the term 'empathy' without attention to its societal power and its potential to exclude, discriminate, and stigmatise neurological minorities. Accepting its colloquial connotation and building upon the intuition of connecting different subjects through identification or perspective taking, I have proposed to understand empathy as the balance between *proximism* and *distantism* – appropriately attending to experiential differences and similarities between the self and other. Acknowledging the immense diversity in people, relationships, and contexts, we need a notion of empathy that is not limiting with respect to how it should be experienced, expressed, executed, and developed. While I sketched out such an account in this chapter, a more fine-grained exploration of what it would mean to understand empathy this way, and what its exact place would be in morality and moral theory, is due. In the next chapter, I will do so by applying a virtue theoretical framework to my proposed account of empathy.

5. Conceptualising empathy as a virtue

5.1. Introduction

Empathy is now and then brought up as a solution to various challenges the world is facing. For example, fostering empathy is suggested to help us in navigating climate change (Chu 2022, Matewos, Torsney et al. 2022), globalisation (Schneider 2018), responsible technology design (Alzayed, Miller et al. 2022), and hate speech (Hangartner, Gennaro et al. 2021). In a similar vein, there is a great interest in the question whether technological developments like social media and video games improve or decrease empathy (Wulansari, Pirker et al. 2020, Knezek, Christensen et al. 2022). Throughout these proposals, empathy is predominantly used as a normative term; as something to strive for. If a technology is, for example, believed to decrease empathy in its users, this is considered a bad thing. However, as I have shown thus far in the previous chapters, whether a normative use of the term is justified and meaningful depends on what is actually meant with the concept, and how to best conceptualise empathy is far from agreed upon.

In this chapter I will set out a conceptualisation of empathy as a virtue and argue why empathy is a particularly important virtue in the current sociocultural climate. While arguments have been made for or against this normative use of empathy, I have argued earlier, in Chapter 3, that we need to be careful with conceptualising empathy as a non-moral concept. The term holds a strong normative connotation in society, and correspondingly, it holds power. However, if we understand empathy as associated with goodness, we need to do this in a manner that attributes the concept to people actually based on merit. The question remains how to do this exactly. The virtue account of empathy that I will continue to set out in this chapter justifies its normative use and fulfils its pragmatic function as a conceptual tool. I will argue that empathy allows us to navigate our intersubjective lives, an essential part of living well as humans, and a part that is currently destabilised by communication technologies and other societal changes. This makes empathy a particularly important virtue in the present and understanding empathy, as such, especially useful.

Before we begin, I will shortly provide some context to why a consideration of empathy as a virtue is due. In addition to (often) being considered something good, empathy is furthermore something we ascribe to persons, to someone's character. However, empathy is traditionally and formally not considered as one of the virtues. Vallor (2020) recently argued that it has been overlooked as a virtue because in

academia (in contrast to how it is used colloquially) it is often conceptualised as a visceral response that does not always contribute to morality, while, she argues, it should instead be understood as a cultivated balance that in fact does contribute to the Good Life. In similar vein, I have argued in the previous chapter to understand empathy as

> *appropriately attending to experiential differences and similarities between the self and other,*

a foundation for a normative and anti-discriminatory concept of empathy. To recall, one of the appeals of this conception of empathy is that it brings the concept back to two common intuitions about empathy: that it involves identification with the other (we are one, connection), and that it involves perspective taking (we are different, alterity). The first highlights attending to experiential similarities, and the latter to the differences. Crucially, both taken to the extreme are problematic. Too much identification, by means of projection, disrespects the other qua subject in their own right – which I call *proximism*. On the other end, disregarding similarities and overestimating the intersubjective distance – which I call *distantism* – invalidates other aspects of the other's lived experience, for example by means of stereotyping or tokenisation. Empathy, associated with goodness, balances between these two, much like a virtue, which is often considered as the balance between two vices (Chapter 4).

If we want to use a virtue account of empathy as a conceptual tool for normative evaluation, for example when considering new technologies, education approaches, or policies, it needs to be more fleshed out. We need a robust conceptualisation of empathy that is sufficiently grounded in moral theory (worthy of its normative use, and corresponding power), and functional as a conceptual tool. In other words, *if we want to continue to use empathy for guidance in our current-day global problems, then we need a concept of empathy that is able to carry that weight.*

In this chapter, I will explore how the concept of empathy can benefit from a more extensive implementation of virtue theory. I will further carve out what it means to consider empathy a virtue, with the aim of making it more substantial, comprehensive, and useful as a concept. With the latter I mean that the concept allows us to better communicate what we mean with empathy, and use it for moral evaluation, inspiration, education, and argumentation. Furthermore, a more robust understanding of empathy as a virtue might play a valuable role in reflection on how to develop this virtue in the present sociocultural climate, shedding light on what can foster or stand in the way of this development, and how to investigate the impact of technology on this.

In section 5.2, I will discuss different aspects of various virtue conceptualisations, defending which specific understanding of virtue I will continue to use. Answering the questions: What is a virtue? What makes a virtue a virtue? And how does it relate to vice? I will carve out a conceptualisation of virtue that is then used to analyse empathy. Specifically, I will propose to understand virtue as 1) developed like a skill towards a moral goal, as 2) a characteristic of a narrative rather than of psychology, and 3) embedded within a meta-narrative; a sociocultural context. I will explain each of these elements in detail. In section 5.3, I will investigate what it means for empathy to be conceptualised as a virtue in this way. I will set out to show how empathy contributes to the Good Life, how its corresponding vices hold one back from it, what it means to be empathetic in practice and how it can be developed. In section 5.4, I will discuss its usefulness, validity, and application as a normative conceptual tool, and discuss its particular relevance for current challenges.

5.2. What is a virtue?

Different virtue ethicists hold different virtue concepts. While an extensive debate on the nature of virtues is out of scope for this chapter, in this section I will set out an account of virtue that I will use for the analysis of empathy. Let's start with a very general answer: a virtue is a good characteristic. Hence, it is needed to specify what is meant with "good", and with "characteristic".

5.2.1. Good

What makes a virtue "good" and a vice "bad"? There are different approaches to answer this question. Originally, going back to Aristotle, virtue refers to those characteristics that help something or someone in reaching their purpose/goal (*telos*) (Kallenberg 2011). For a watch this could be accuracy, as its purpose is keeping time. Human virtues then refer to characteristics that assist humans in reaching their *telos*, which is in this line of reasoning considered *eudemonia*, the Good Life, i.e. a life that is not simply lived but that flourishes[12]. We then quickly come to the question what is to be considered the Good Life and which virtues enable a person to attain it.

[12] Some other virtue approaches differentiate between moral virtues and other types of virtues, like instrumental virtues or epistemic virtues. However, whether this distinction makes sense depends on your ultimate commitments to the nature of morality (in what is a "moral" virtue and what is not)

MacIntyre has analysed how virtue ethics, over time, has focused on different virtues, and how this can be related back to sociohistorical contexts that change the idea of what the Good Life is, and which virtues are needed to reach it (Kallenberg 2011, MacIntyre 2013). Aspects of the context in which a life is lived might pose specific challenges that hold one back from living the Good Life, and virtues are those characteristics that allow one to overcome these challenges. MacIntyre argues to consider the human and their virtues and vices in a narrative form, placed in what he calls a *meta-narrative*, a culturally and historically situated shared story, found in and shaped by practices, traditions, and institutions. Importantly, this contextual sensitivity is not to be confused with relativism, but rather this contextualised perspective on virtue allows us to adequately align virtue theory with moral challenges of the time. This would involve considering which virtues are most important/morally salient/relevant for a human to have to live a Good Life, given the sociocultural context – the practices, institutions, and traditions that are in place at the time. At present, in a world increasingly formed through technological innovation, this might involve reconceptualisation of known virtues, or the invention of new virtues, to account for the complex impact of technologies on societies, humans, and the environment (Snow 2019). I will argue later how a consideration of the present sociocultural context asks for a prominent (re)consideration of empathy as a virtue.

To recap, when arguing something is a virtue, which I am about to do for empathy, one needs to argue why and how this assists one in pursuing the Good Life within the traditions, practices, and corresponding challenges of the time, and how the absence of this virtue, or presence of the complementary vice(s) is preventing humans to do so. The latter presents an insightful starting point for consideration. What is considered to be a virtue is typically contrasted with vice, characterised by human predispositions or temptations that stand in the way of the Good Life (Foot 1997). The relationship between virtue and vice can be modelled in different ways, depending on the specific virtue under consideration. A number of questions then need to be tackled: Is the virtue a trait of which way say, 'the more the better' (1)? Or is it a trait which one can have too much of, which would make it bad again (2)? Or is virtue not so much about the right amount, but more so about a balance between two opposing bad tendencies in a horizontal way (3)? The answers to these questions are especially relevant for reflection on the development of the virtue, how to foster it, and how to teach it. In

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and the meaning of eudemonia, a debate which is out of scope for this dissertation. What is important here, is that to argue that empathy is a virtue, I need to defend why and how empathy is relevant to living well.

the following, I sketch out these different potential models on the relationship between virtue and vice:

(1) Virtue | Vice	A virtue can be the absolute opposite of a vice, for example benevolence and malevolence.
(2) Deficit (vice) < Virtue < Surplus (vice)	A virtue can also be the balance between two vices in a vertical way. The deficit of the trait is a vice, but a surplus of it is as well. Only the right 'amount' of the trait is virtuous. For example, a lack of confidence is insecurity, while on the other extreme there is arrogance.
(3) Vice A | Virtue | Vice B	A virtue can be the balance between two vices in a horizontal way. This balance is not between a surplus or deficit of one trait, but rather between a deficit/surplus of two traits (as is the case for empathy, I argue in part 2).

All three models above, imply that there is a gradient between virtue and vice. This distinction is gradual rather than categorical, and it does imply maximisation (there is some optimum of each virtue). 'Maximising' virtue conceptualisations have been critiqued for being too demanding, and thus it has been argued that traits should be valued in a relative, not absolute manner (Bradley 2005). However, the idea of a virtue optimum is only unrealistic and unfair if applied in a rigid and – unrealistic and unfair – way. A maximising conceptualisation of virtue actually lends itself quite well for appreciating virtue as relative, not absolute, and acknowledging the presence of (relative) vice in reality. Both virtue and vice can be viewed gradually in such an approach where the virtue itself is conceptualised as an admittedly too demanding 'ideal'. This allows us to consider every nuance in one's distance to this ideal, as well as one's relative distance to it compared to others, and even better, one's relative distance to one's own past, allowing to reflect on virtue development in one's own life narrative (Darr 2020).

To recall, a virtue is a characteristic that assists in reaching a *telos,* and in the case of human virtues, this *telos* is the Good Life. This focus on *telos* seems very effect oriented. This is even more explicit in the line of reasoning that can be referred to as

virtue consequentialism, where it is argued that to determine whether a character trait is to be considered a virtue or not, one needs to consider the expected net effect the presence of the trait has on the intrinsic value of the world (or a variation of this claim)[13] (Bradley 2005). However, this is not to say that effectivity is what makes one virtuous. Similarly, while a virtuous agent might typically perform certain acts and condone others, virtues cannot be captured merely by actions (Hacker-Wright 2010). This is important to note in relation to the use of a virtue concept for normative evaluation. Conceptualising a virtue and contemplating its contribution to living well is one thing, but justly applying it in practice is another. When ascribing a virtue to someone, something praiseworthy, this cannot be reduced to their actions and/or the consequences of their actions, but neither can it be defined as merely having a good intention. This brings us to the question: 'what does it mean that virtue is a characteristic?'

5.2.2. Characteristic

While some consider one of the attractive aspects of virtue theory to be its coherence with (moral) psychology, and its constructive relevance to moral progress through the notion of virtue development, others have critiqued it for lacking this exact coherence (Wolf 2007, Upton 2009, Croom 2014). Specifically, the failure to predict human behaviour based on "personality traits" across different situations in social psychological studies has been used as an argument against the existence of virtues, referred to as the situationist critique (Croom 2014). However, instead of undermining the very idea of virtues, this suggests that virtues may better be conceptualised differently. There is a sense of robustness or consistency to the idea of virtues. It is not something one gains or loses overnight. A relatively virtuous person might make a faux pas, while a relatively vicious person might occasionally do a good deed. However, rather than interpreting this as cross-contextual or temporal consistency, Ryan Darr (2020) argues that this sense of robustness should be understood as the integration of virtue in one's life narrative. In other words, the "characteristic" aspect of virtue is not of a psychological nature ("personality trait") but reflected throughout one's enacted character. This means that consistency is not to be found in similar behaviour across

[13] This seems like a move away from the Aristotelean notion of a virtue assisting in pursuing the Good Life, as it focusses on the world rather than an individual. However, these do not have to be incompatible, if one does not understand the Good Life in an individualistic manner (which many, including me, do not, as I will highlight in part 2).

different contexts, but in coherent integration of the virtue in one's life story: *narrative integration*.

An effective way to theorise what such narrative integration could mean in practice, is seeing a virtue as something that can be developed throughout one's life like a skill. As (Stichter 2007) argues, virtues are like skills in the sense that one develops them through self-regulation to realise a certain goal. What "self-regulation" and "goal" mean in this context need to be clarified and I will start with the latter. In the case of virtues, this goal is the intention to embody a moral ideal. It is of the utmost importance to explicate what it means and requires to have such an intention. This is because another critique some virtue theories face is that they embody an intellectualist tendency in approaching the goal-oriented dimension of virtue (Annas 1995). A virtue theory that requires someone to explicitly (be able to) reflect on their moral intentions, and give words to this, would make being virtuous exclusive to those who enjoyed the education to do so as well as other social, psychological, and cognitive privileges. While Stichter has developed his "virtue as skill" account exactly to oppose this, his model still gets critiqued for intellectualism for its emphasis on intention (Bashour 2021). To explain, Bashour argues that one can imagine someone developing virtues without having a specific moral ideal and the intention to self-regulate towards the goal to embody it as developing a skill. In his critique, Bashour provides a hypothetical but realistic example of a young man who obtains a caretaker role at a very young age due to tragic circumstances. In this position, he develops several virtues. Bashour argues that he didn't do so to reach a personal moral goal, as Stichter proposes. He argues that the young man would say "I didn't have a choice, the situation required me to do this", rather than saying "I wanted to develop these and these virtues because I hold these moral standards." However, I would argue that the phrase "I didn't have a choice" reveals underlying moral ideals. He *did* have a choice. He could have abandoned his family, for example. The fact that he didn't even consider these options is actually very telling of a certain moral ideal he holds and the goal to embody it. He values taking care of family and has set that as a moral ideal he intends to embody, and likely to people in general (which would explain why he did not even feel the need to consider or name this explicitly). He developed certain virtues over time, by holding himself to this goal, and refining the "skills" demanded by his context – in the sense of Stichter's account of virtue - by regulating his behaviour, his actions, to become more in line with this goal. He had the intention of being there for his family. This intention didn't have to be explicit, nor did he have to be actively aware of it, or verbalise it, for it to exist.

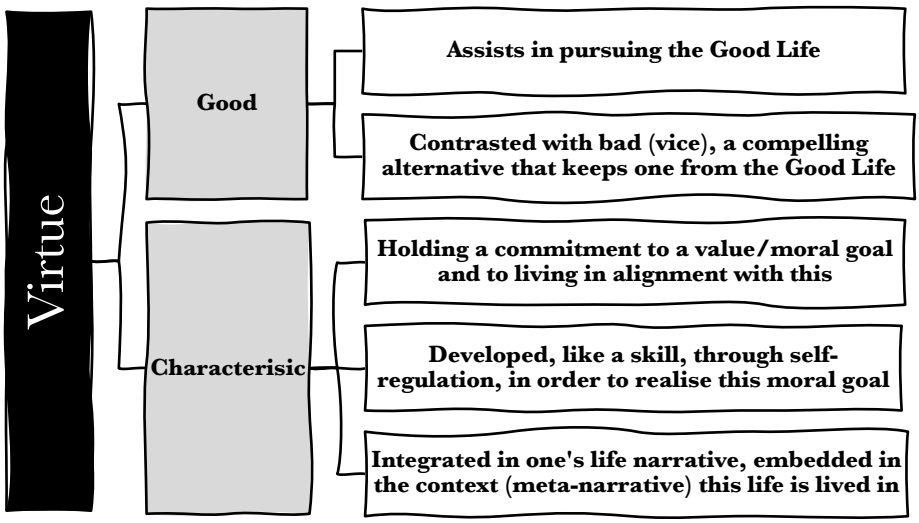
It seems to me that what feeds the debate between Stichter and Bashour is the notion of 'having an intention,' which is (unnecessarily) loaded with intellectualist connotations. Thus, to avoid confusion with the debated term *intention*, I propose to use the word *commitment* from here on. With commitment I mean something similar to how I read Stichter's notion of *intention,* namely, that a person is committed to embodying a certain moral ideal, developing virtue like a skill towards this goal. This commitment can exist pre-reflectively and implicitly, as proposed in the example. I will go into what this means in the case of empathy in section three.

Thus, I am proposing that a virtuous person has a commitment to a moral goal that contributes to the Good Life and has developed the skill put this into practice[14]. This second aspect involves recognising morally relevant aspects of a situation and which actions would align with the moral ideal at hand. According to Stichter, this is developed through self-regulation, meaning that one recognises when one fails to meet this moral goal, and learns from it. This does not refer to an exclusively cognitive reflective process, to come back to the concern of intellectualism, but also involves emotional capacities (Roeser 2009). For example, emotions such as guilt or shame can help one recognise an aspect of the skill that needs refinement (Stichter 2020). Importantly, this notion of virtue like a skill highlights the enacted nature of virtue. It is not some abstract theoretical construct, but it is practiced, felt, developed, improved, and embodied. You can know as much about a guitar as you want, but you will need to play it, fail at it, practice it, to become a better guitar player. At the same time, understanding concepts of guitar playing (and concepts of music theory), could help you in this process. It is in that sense that virtue is like a skill.

This exploration of what it means for a virtue to be a characteristic and how it can be developed like a skill is needed to answer the question asked before the start of this subsection: how do we use a virtue concept for normative evaluation, and how does this relate to evaluating actions and consequences? According to the approach to virtues proposed here, the element that can being evaluated (the "unit") as virtuous (or vicious), is one's enacted character in one's life story, in which virtue van be developed over time like skill. This means that actions can suggest virtue or vice only by positioning them in the agent's life narrative, situated in a meta-narrative. Only there do they have meaning. Robustness or consistency as essential to virtue is to be considered in exactly this light. Consider, for example, someone who lives in a

[14] Sometimes distinctions are being made between motivational virtues and teleological virtues. However, this does not make sense in the notion of virtues I am working with here, as they are both teleological (in Aristotelian sense) and motivational (in moral psychological sense) in nature.

relatively static environment, and is very skilled at living up to their values in this day-to-day context, showing temporal consistency. Someone else has a more dynamic environment, for example they have lived in different cultures, and have developed the skill to adjust their actions to the context, showing cross-contextual robustness (likely involving more "moral failures" in the process). It is not obvious who of these individuals is more virtuous. Importantly, *both* agents show consistency in that the respective value (their moral goal) is integrated in their *own life's story*. They developed virtue, like a skill, in order to do so. And, to recall, their stories are embedded in the meta-narrative their lives are lived in.



5.3. Empathy as a virtue

5.3.1. The goodness in empathy

5.3.1.1. Empathy and living well

A virtue is a good characteristic because it allows one to pursue the Good Life. As conceptualised by many philosophers, across various cultures, humans are relational beings, and connecting with others is essential in living well. While integral and essential, interacting with and relating to others can also be challenging. As I will argue in this section, the virtue of empathy assists in realising the relational intersubjective

component of the Good Life. Namely, by facilitating appropriately approaching other subjects as subjects, whose experiences partly overlap and partly differ from yours.

Allow me to expand on this. To connect to others, one needs to recognise others as subjects who have their own lived experiences. With regards to this notion, two opposing starting points can be distinguished. Some consider this fundamentally as a challenge. Another subject is a mystery, a separate being, and we have to somehow grasp a conception of the other's mental states in order to bridge that gap (starting point of theory of mind approaches, or the other mind problem) (Descartes 1984; Ayer 1953). Contrastingly, some consider as a starting point to connecting with another subject the shared experience as embodied relational minded beings (Stein 1917; Gallagher 2008). Approaching the other as a complete mystery and not assuming anything has been rightfully critiqued for being epistemically inadequate or even ethically dangerous (Long 1964; van Grunsven 2015), but we also cannot always rely on shared experience and take for granted that intersubjectivity is appropriately dealt with, especially when experiential life worlds differ more substantially. Thus, both starting points make sense but have their limits at the same time (Van Grunsven 2022). Respecting the other's subjectivity requires attendance to both the shared and separated experience, the known and unknown, similarity and alterity (Zahavi 2022; Broome 1991). As I will argue in a moment, disregarding one or the other, which are both natural human tendencies, obstructs appropriate intersubjective connection, and as such, living well. Empathy is the quality that allows one to overcome this, pursue this aspect of the Good Life, and can on that ground be considered a virtue.

This is especially applicable in the current sociocultural climate. As I proposed before, which virtues are put in the foreground and what they entail in practice, is to be considered in light of the context or meta-narrative a life is lived in. Besides arguing that empathy is a virtue in the first place, I suggest it is of specific relevance right now. For decades, in Western philosophy, science, politics, and public cultural discourse, individualistic values have had the upper hand, and the relational aspect of being human and human flourishing has been overlooked (Harding 1987, Taylor 2004). This has formed our institutions, practices, and traditions in a way that poses an obstacle for the intersubjective part of living well. I observe that due in part to technological development, a challenging paradox has occurred between individualisation and fragmentation on the one hand and globalisation and hyper-connectivity on the other (this will be expanded upon in Chapter 6). Put differently, independence is regarded as a core value in this meta-narrative, while some of its practices and institutions foster interdependence (also cross-culturally and cross-

generationally). Additionally, technologies such as social media decrease and increase perceived experiential distance at the same time. This friction poses new challenges to navigating our intersubjective lives. These features of the meta-narrative influence what it means to be empathetic right now in practice (integration of empathy as a virtue into our own life stories) and made it all the more important. This will be further explored in detail in Chapter 6.

5.3.1.2. The alternatives: distantism and proximism

What makes empathy so difficult is the careful balancing act it requires and our natural predispositions to overlook either similarity or alterity. Humans have a tendency to think in an in-group/out-group manner and depend on projection within groups and stereotyping or othering of other groups. This has been shown in a variety of research, often referred to as the similarity bias in empathy (Prinz 2011). This tendency has been considered in light of evolutionary benefits (Preston and De Waal 2002). While some see this as a reason not to grant empathy a significant role in morality, these observations are actually coherent with a virtue model of empathy. Because humans often have a tendency towards proximism with ingroup members and distantism with others, developing empathy and finding its balance (through self-regulation, in the sense explained before), is so praiseworthy. This is similar to how courage is virtuous in overcoming our predispositions towards cowardice or foolhardiness. To recall, a virtue assists one in pursuing the Good Life, and is contrasted by qualities that can hold one back from this (Foot 1997). Proximism and distantism both lead to the latter, by hindering intersubjective relations – which needs to involve attendance to both what is shared and what is different.

One may object to this on the grounds of demandingness. Finding this perfect balance is simply impossible. Even the most empathetic person imaginable will diverge from empathy's balance in either direction from time to time, if only simply because of misunderstandings and the impossibility of ever truly knowing the entirety of another's life world. Therefore, the approach I am articulating is not about setting a harsh criterion to label people as "virtuous" or "vicious". On the contrary, using the gradual virtue-vice model discussed in section 5.2.1, my account of empathy acknowledges our dispositions towards both proximism and distantism, and makes room for the idea that even to partly recognise them in ourselves and to meliorate them can be considered praiseworthy to an extent. It accounts for human vice and imperfection, while providing a framework for development and improvement.

In fact, focusing on empathetic perfection may be non-virtuous. As perfect empathy is an impossible task to achieve, pursuing it will end up distracting resources (time, energy, etc.) from other morally important things. Notably, some situations may be more forgiving of proximism and distantism than others (consider paying for your groceries versus having a heart to heart with a friend). Recognising what is morally salient in a situation and dealing with our (human) limitations accordingly is part of being virtuous. That being said, I argue that empathy should be considered one of the virtues[15], and one that is of particular importance in the present. It is worth considering how we could support the development of this virtue, what role modern technologies (could) play in this, and how a better understanding of this is a valuable addition to one's ethical toolbox. I will turn to this task in detail in the next chapter. Let's first continue to explore what it means to be(come) empathetic.

5.3.2. Empathy as a characteristic

5.3.2.1. Commitment to the moral goal behind empathy

To recall, an essential part of virtue is holding a certain moral goal, which does not have to be explicit. To value empathy involves having the *commitment* to respect other subjects *as subjects* and recognise (to repeat, this does not have to be explicit or reflective) that the other has an experiential life world that partly overlaps with and partly differs from yours. Empathy involves appropriately attending to these experiential differences and similarities between the self and other which allows us to properly navigate our intersubjective lives – an essential part of living well. In practice, this means having the *readiness* to approach other subjects as such.

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15 While I argue here that empathy is a virtue, I am not proposing a moral theory in which empathy is the only or even most important concept on which to do moral evaluation (nor am I necessarily defending a pure virtue theory). Empathy should be considered one of various virtues one can hold and develop. Translating it into actions in real life situations, empathy is certainly not the only virtue one needs. For example, when someone is almost falling from something steep, courage to save them would be a more relevant virtue here than empathy. If one would be so far from empathetic to not care at all about the other human's potential pain (extreme distantism), that would be problematic, but empathetic excellence is not needed here. Actually, empathic excellence would be useless here if cowardice would prevent the person to run over and save the other. Consider it a screwdriver in a toolbox. Having no screwdriver would be a problem. Having the best screwdriver in the world but having no or a very poor hammer would also not allow one to complete the project.

This commitment is crucial to empathy. Consider for example a manipulator who carefully considers the perspective of their victim, and the way it is the same and different from their own – this is not to be considered empathy. Manipulation undermines another subject *as a subject*. Instead, it treats the subject *as an object* to reach a certain goal.

5.3.2.2. Developed like a skill

An empathetic person appropriately estimates the other's subjective experience in relation to their own. For this, both a sense[16] of their own experience and of another's experience are needed. To recall, according to Stichter, one develops a virtue, like a skill, through self-regulation towards a certain moral goal. In the case of empathy, this involves recognising when, in a particular situation, one attends to the other in a proximistic or distantistic manner and making adjustments accordingly. Recalling the critique of Bashour to Stichter, this does not require an explicit understanding of the principles, for example thinking "I am being somewhat proximistic right now" (but you could). One does not have to have heard of the words proximism, distantism, or intersubjectivity in order to grasp the phenomena they refer to. Importantly, a general commitment to appropriately attend to other subjects is needed, and the humility to sense when and how one is in the wrong.

Through such a process of self-regulation, one can become more skilled in approaching other subjects in an empathic manner. However, even when relatively good at it, situations will keep on occurring where one resorts to relative distantism or proximism. This can, for example, occur in cross-cultural communication. Broome (1991)'s account of empathy in this domain (called "relational empathy") is very much in line with the account of empathy explored here.

> "[…] empathy is particularly important when there are significant differences between the subjective worlds of two participants in a communication event. As long as two

[16] I use the term sense rather than understanding to avoid confusion of this introducing a rationalistic or intellectualistic requirement into this framework after all. As mentioned before, there are various different approaches to whether and how we have epistemic access to another's life world. Some popular examples of ways to get a conception of another's experience are conversational and listening skills and interpreting facial and bodily expressive cues. Reviewing this landscape is out of scope for this research, but I do want to suggest that different approaches can co-exist, and such an outlook (including multiple strategies as valid options to access another's life world) may be better suited to account for human diversity, acknowledging that in practice one can be empathetic (or unempathetic) in a variety of ways.

> individuals who have developed relatively similar constructs for viewing the world are communicating, they can engage in satisfactory communication on the basis of projection." (Broome 1991)

I would add to this that in the case of similar life worlds, projection as a strategy can be relied on more without being necessarily "proximistic" – as projection in this case does not have to be inappropriate, if it actually concerns experiential similarities. As such, I don't agree with Broome that empathy is more important in interactions with bigger differences, but it can be more challenging if one is used to projection being relatively unproblematic. Inter-cultural and in other ways diverse interactions have become a more prominent aspect of our meta-narrative highlighting different dimensions of what it means to develop empathy like a skill (I will come back to this in the next subsection).

To recall, empathic perfection is unobtainable, and a rigid focus on perfection can distract from other aspects of living well and could even, paradoxically, obstruct empathic development. Thus, as argued by (Stichter 2020), a constructive internal and external culture towards moral imperfections/vice (and related emotions such as guilt and shame) is essential here, which a virtue approach can support if interpreted and implemented correspondingly. With a similar 'progress over perfection' attitude, Broome notes:

> "Previous approaches to empathy implied that students needed to "overcome" their prejudices, or set them aside, whereas a relational approach suggests they learn to recognise the influence of prior understandings and seek to integrate them with those of the other in developing empathic understandings" (Broome 1991)

A revealing case to consider with regard to empathy development is the so-called double empathy problem, which, as I've discussed before, has been introduced to explain empathic difficulties occurring between autistic and non-autistic (allistic) people (Milton 2012, Chown 2014). Connecting across neurotypes introduces quite fundamental experiential differences. This can be compared to cross-cultural interaction, but it is, to a lesser extent, acknowledged, researched, and in public awareness (Hillary 2020). As I have discussed, a mismatch can be seen between the accreditation of empathic successes and failure between the autistic minority and allistic majority. In general, autistic people are interpreted as not empathetic for failing to appropriately attend to the life world of allistics, while the latter do not get the same scrutiny for failing to bridge this same gap (Chown, Hughes et al. 2020). At the same time, being a minority, autistic people have more opportunity to practice and develop cross-neurotype empathy than allistic people do (Chown 2014). This complicates the

ascription of praise and blame, but also does not excuse a majority or dominant group in general for not pursuing empathic development towards minority or marginalised groups.

5.3.3. Narrative integration

So far, I have explored why empathy should be considered a virtue (why it is good), and what it means to value empathy and develop the virtue, like a skill. To continue with the exploration of empathy as a virtue, let's now expand upon the question what it means for empathy to be a characteristic. This is specifically of importance to explore the use empathy as a normative conceptual tool, which is, to recall, one of the goals of this chapter. From the virtue perspective I use here, empathy should not be ascribed to a certain action or effect, but to a person's life narrative. An action only has meaning with regards to virtue or vice in context of this narrative (Darr 2020). One's role in one isolated conversation does not imply one is empathetic or not. This is not to say that actions cannot *suggest* the degree to which one is empathetic, whether one values empathy, to what extent one is skilled in realising this value, whether and how one is developing/refining this virtue through self-regulation, and how one deals with their tendencies towards distantism and proximism – when placed, understood, and evaluated *in the context* of their narrative. Two things further complicate such evaluation.

Firstly, one needs to consider the context, the meta-narrative (including institutions, traditions, and practices) the life is lived in. Congruently, empathy as integrated in one's narrative looks differently across such contexts. As mentioned before, in the current landscape, globalisation and digitisation changes what it means to be empathic. Specifically, it required more practice with diversity, both in the people we interact with, and in the ways we interact. The latter refers to, for example, being skilled in navigating experiential differences and similarities both offline and online, interpreting sometimes "real" facial expressions and sometimes emoji's. Changes in the meta-narrative ask for a reconsideration of what it means coherently integrate the virtue of empathy into one's own life narrative in practice. Mechanisms for social interaction we were used to rely upon have become unsatisfactory, introducing new tendencies towards proximism and distantism, and thus, ways that hold us back from living well. At the same time, new opportunities have arisen that ameliorate historical distantistic or proximistic tendencies. These processes will be further explored in Chapters 6 and 7. They highlight the importance of considering actions with regards to virtue or vice only within the context of the narrative of one's

life as a whole, as well as properties of the meta-narrative the life is lived in. This virtue conceptualisation of empathy lends itself to make sense of how evolvements of our society have changed what it means to be empathetic, and why it needs more consideration in the present.

Another aspect that adds to the complexity of using the concept for evaluation, is its relational, discursive nature. Empathy does not exist in isolation, but only in relation to another subject[17]. Only in an intersubjective space are there experiential differences and similarities one can (in)appropriately attend to. A proposed indicator of empathy is whether the other feels empathised with (Howick, Morley et al. 2021). However, I would oppose to this[18]. Partly, it is too demanding, as it requires the empathisee to have an understanding of the empathiser's understanding of the empathisee's experience (metaintersubjectivity) (Gillespie and Cornish 2010). At the same time, it is too forgiving, because, for example, manipulation can be misrecognised as empathy by the empathisee. Additionally, epistemic access to another's experience may be intentionally or unintentionally obstructed by the empathisee, for example through deception. So, the relational nature of empathy complicates the evaluation of empathy in one's role in one conversation (Broome 1991). The interaction is not only to be placed in the context of one's narrative, but also in the narrative of the other. Furthermore, properties of the meta-narrative can be of relevance here again. Power dynamics, cultural practices, and social norms can shape perceptions of another's empathy. Consider, for example, misrecognition of autistic empathy due to narrow views on how empathy can be experienced and expressed as discussed in Chapter 3.

With all these factors that need to be considered, it is not a simple task to make claims about who is empathetic and who is not (or to what extent). This conceptualisation of empathy invites a nuanced, critical, and humble approach to the use of empathy as a normative conceptual tool. The challenges and complications made explicit here can be used in this analysis, and to clarify limitations of such evaluations. The next section will go further into the use of empathy as a normative conceptual tool.

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17 I will briefly discuss empathy towards fictional characters in stories in the Discussion of this dissertation.

18 This is not to say there is no value in making another feel empathised with. This may improve the wellbeing of the other person, improve the relationship, and in general have a positive net outcome on the world. However, this is considered from a consequentialist perspective, and my point here is to argue it is not a necessary requirement nor reliable measure for empathy as a virtue, for the reasons given.

5.4. Empathy as a normative conceptual tool

So far, I have sketched out a model for empathy as a virtue. I discussed why empathy deserves to be considered a virtue, what the value of empathy is, what it means to be empathetic, and how to develop empathy. I also argued that a virtue approach to empathy shows that, considering the immense complexity of a life and the context the life is lived in, we need to be very cautious in making evaluations, especially since wrongful judgements, for example when overlooking important contextual aspects, involve unjust praise or blame. However, while being careful in coming to conclusions about the empathy (or lack thereof) of individual people and their character, this concept of empathy as a virtue can be used to approach a variety of questions, problems, and challenges.

As introduced before, empathy is being challenged by sociocultural changes such as globalisation and technologies. These contextual aspects have brought new challenges to overcome, for example dealing with wider diversity and new methods of communication. This makes a better understanding of empathy, and potential strategies for empathy development, all the more important and urgent. The virtue approach used here highlights the importance to consider the meta-narrative a life is lived in. For example, technological development can drastically change traditions and practices, and therefore change our understanding of virtues, by changing the actions/practical skills needed to realise a moral goal (for example online conversational skills, supporting empathy) (Snow 2019, Marin and Roeser 2020, Vallor 2020, Osler 2021). What it means to be empathetic now, in this world, is different from what it was a hundred years ago. Consistent stays the moral ideal, the reason why it contributes to the Good Life, but dynamic is the integration of this moral ideal in one's life, the way this can be realised, the skills one needs to develop. The virtue approach to empathy introduced here can help us to rethink what empathy means in practice, to evaluate technologies or societal changes in light of their relation to empathy and reflect on the properties of our meta-narrative that challenge or support living well. This can be done merely descriptively, but as strongly grounded in moral theory, could also bring about prescriptive contributions.

Another interesting line of questioning that my virtue approach might shed light on is the way modern developments (and how they shape institutions, traditions, and practices), could help or undermine the process of empathy development itself. In various ways, technologies can positively or negatively contribute to self-regulation, the ability to recognise morally relevant aspects of a situations, to recognise mistakes, to respond to such mistakes, and increase or decrease agency/control to do differently

next time. Understanding of such impact could then inspire technological development that supports rather than undermines empathy. I will develop a framework for this in the next chapter.

Furthermore, taking a virtue approach to empathy sheds light on ways we could better facilitate virtue development, with potential recommendations for moral pedagogy and education. The three aspects of the "characteristic" part of virtue discussed were 1) having a moral ideal and the commitment to live in alignment with this, 2) developing the skill to realise this goal, and 3) consistency is found in coherent narrative integration. With regards to empathy, this firstly means that one needs to value attending to another subject qua subject, and the potential pitfalls related to navigating our intersubjective lives, namely proximism and distantism. This, to repeat, does not have to be explicit, but involving these terms in education or public discourse might be beneficial. Rather than not valuing empathy at all, I fear it is often taken for granted that we are empathetic, while empathy is becoming less and less trivial in our changing social environment. A general disposition of humility towards our ability to fully grasp another person's experiential life is due in order to recognise tendencies proximism or distantism and adjust as such. As mentioned several times, this requires a constructive outlook on moral failure, and an internal or external culture of virtue perfectionism should be actively avoided.

Next to improving recognition and non-trivialisation of empathy as a value/moral goal and creating a supportive environment for developing this virtue, like a skill, there may be some more practical skills that can be taught to support empathy. For example, conversational skills across different media. What these skills are exactly and how these can be best taught, has been extensively researched, and can be investigated further to keep in touch with the ever-changing meta-narrative, the sociocultural context. Importantly, however, while these skills can support one in developing and integrating virtue in one's life, they shouldn't be conflated with virtue as such.

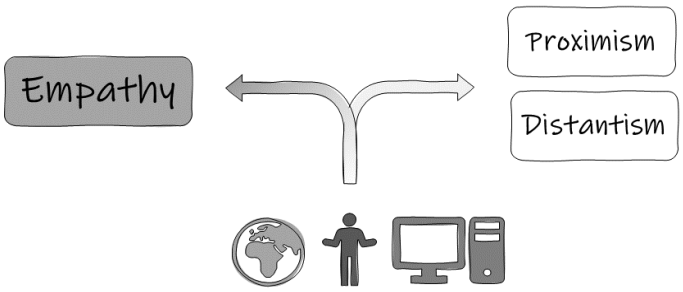
Notably, my conception of empathy does not provide a step-by-step guide to empathy. It does not provide a protocol one can follow, or that one can use to measure empathy. Rather, it delivers a multi-layered and complex approach to evaluating whether someone is empathetic or not, namely through consideration of coherent narrative integration, further complicated by properties of the meta-narrative and the relational nature of empathy. Some may find this unsatisfactory. However, justification should be prioritised over simplicity in normative evaluation. The model of "proximism – empathy – distantism" is, arguably, quite simple and intuitive. It functions well in understanding (or explaining/teaching) empathy as a moral goal,

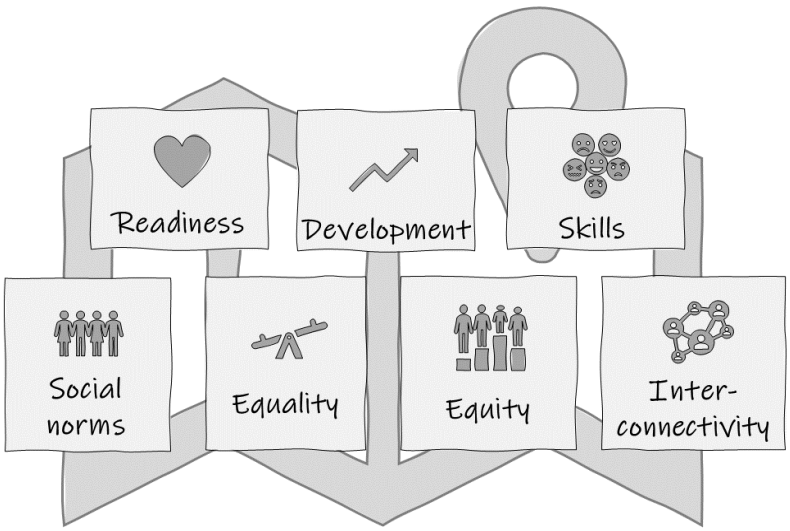
how we tend to make mistakes, and guiding self-regulation in virtue development. It is not easily applied to judgements about an individual's character, or specific actions/behaviours. This is not to say that we should never use it in this sense. In fact, the starting point of this investigation was that we tend to use the concept in this way, and this needed to be justified. Rather than removing the possibility to meaningfully use the concept in relation to persons, we should explicate its complexity and emphasise the need for humility and nuance towards making judgements of character, especially in formal contexts, such as research or law.

5.5. Conclusion

In this chapter I have developed an account of empathy as a virtue. According to this account, empathy should be understood as the virtue of appropriately attending to experiential differences and similarities between the self and others. This is contrasted by the vices distantism (disregarding similarity) and proximism (disregarding difference). Empathy allows one to navigate intersubjectivity, recognising the relational component of the Good Life. In the current sociocultural climate, the latter is often underappreciated, and various elements of our shared meta-narrative challenge our abilities to navigate intersubjectivity. Globalisation, interconnectivity, and the many ways technologies currently mediate the way we relate to one another, have introduced new tendencies towards proximism and distantism. They have also, however, provided new possibilities for empathy. This requires us to put empathy on the foreground as one of the virtues that is of high importance for living well in the present context. It also highlights how, while the value of intersubjectivity and respecting another's experience have stayed the same, what it means in practice, and the skills needed to embody and enact this moral goal, have changed. I have continued to set out what it means to be empathetic, how it can be developed, and how it can be evaluated. In sum, understanding empathy as a virtue has many benefits. It has a normative foundation which can justify its use as a normative concept and the power the concept currently already holds, it allows for integration of the ever-changing social context on what it means to be empathetic, it offers a method to reflect on new technologies and societal changes with regard to empathy, and it provides a constructive approach for empathy development and moral progress.

Part III: Empathy and communication technologies





6. Technology mediated empathy: how communication technologies change both the players and the game, and what to do about it

6.1. Introduction

Our social lives have changed and are changing rapidly with the integration of communication technologies (CTs). We have new ways to connect with other people and the ability to make connections we otherwise wouldn't have that easily. This has changed our social and moral landscape in various ways. Whether certain changes are improvements or not, and accordingly, where we want to go in the future, is to be reflected upon. This chapter focusses on a specific element of our socio-moral domain: empathy. Some often-asked questions are: Do technologies make us more or less empathetic? Is Gen Z less empathetic than older generations, because of the technologies they grew up with? Should we do something about this? And if so, what, and who? These are not the questions I am about to answer in this chapter. This because, I argue that we first need to take a step back and reflect on how we should actually approach such questions. In this chapter, I will set out a theoretical normative framework that can be used to approach questions about CTs and empathy.

In order to consider what impact CTs may have on empathy, we need a clearer grasp on how to best understand empathy, and its potential relation to technology. Importantly, and as I have been discussing throughout the previous chapters, while the concept is often *used* normatively for evaluations or guidance, many *conceptualise* empathy descriptively and not as a moral concept. To complicate things further, it is unclear whether we can simply apply an existing understanding of empathy onto CT use. Instead, as I have started to argue in the previous chapter, we need to understand empathy as dynamically situated in a changing sociotechnical world. Some trends in popular conceptualisations of empathy that I have discussed in previous chapters are particularly limiting or even problematic when applied to an evaluation of technologies, as I will argue in this chapter.

A better understanding of how CTs shape our social relational lives and some of its ethical dimensions is needed. The question remains whether and how we can use

the concept of empathy to do so. A critical reconsideration of empathy as a phenomenon in a social environment that is more and more shaped by CTs is needed, or so I argue. This is especially important in order to use the concept to evaluate these technologies and their impact in terms of desirability and guidance to shape our future. To continue using it normatively, I have argued in the previous chapters that we need to understand empathy explicitly as a moral concept (in a way that grants the concept this normativity), as well as contextually situated and dynamic, relational, and diverse.

Therefore, in this chapter I will build upon my *virtue* approach to empathy (Chapter 5) to explore different ways in which CTs can mediate empathy and have changed what it means to be empathetic in practice. Together, these different dimensions of "CT mediated empathy" can be used as a framework to evaluate and improve technologies, their implementation, and their use. I argue that the moral significance of empathy that justifies its normative use stays constant, but CTs change how it can be put into practice and developed as a virtue. These changes can be considered when reflecting upon the desirability of existing and emergent technologies.

Importantly, I will focus not only on CT mediation of empathy on a user level (micro), but also on a societal level (macro). There has been some rightful critique of the individualistic focus in the ethics and philosophy of technology (Coeckelbergh 2018). This individualistic emphasis translates, among other things, in user-centred investigations of technologies. While such investigations are needed, it is at the same time important to reflect on the impact of technology on a societal level. In the exploration of CT mediated empathy executed here, both the individual users and the society they are embedded in, the players and the game, are considered.

I will start in section 6.2 with relating the concerns I have with popular conceptualisations of empathy to CTs and argue how my virtue account of empathy remedies these concerns. I will also introduce how communication, communication technologies, and technology mediation are understood in this chapter. In section 6.3 I will explore different ways in which CTs can mediate empathy, first on a micro and then on a macro level. Based on this analysis, I will introduce a framework that can be used for reflection in technology design, implementation and policy to support empathy in an ecosystem of humans and technologies in section 6.4, along with other implications and recommendations. While providing various examples throughout, I do not analyse a specific technology in detail. Rather, the analysis aims to serve as a broad framework that can be applied to a variety of CTs. Chapter 7 will then apply this framework to a specific subset of CTs in detail.

6.2. Theoretical foundation

I will start by laying down a theoretical foundation for my reflection on CT-mediated empathy. First, I will build upon the previous chapters to discuss problems in how empathy is understood and used as a concept and recap my virtue account of empathy. Then, I will discuss what is called "technology mediation" to set up the analysis of how CTs can mediate empathy both on a micro and macro level (section 6.3).

6.2.1. Problems in conceptualisations of empathy

Even without the consideration of technologies, there is no consensus on how to best conceptualise empathy (Chapter 2). Moving forward, there are three trends in empathy concepts that, I argue, need to be addressed and avoided. Firstly, empathy, even though predominantly recognised as a relational or social phenomenon, is often conceptualised in an individualist manner - as a trait an individual can have or develop to varying degrees, and as something we can measure in controlled isolated experiments, removed from the real world. Such an approach tends to overlook societal and relational factors in (developing) empathy. With regards to technologies, such an individualist approach to empathy only leaves room to study the impact on the user-level, without regards for wider societal effects, and the relation between changes on these levels. It gives an incomplete picture of what it means to be empathetic in a particular society, towards actual other persons. Empathy does not exist in isolation. There is at least another subject (the empathisee), but also a larger societal context, with social norms, relationships, hierarchies, culture, technologies, etc.

The second concern regards having a static conceptualisation of empathy, which refers to the tendency to make the assumption that how empathy was experienced, developed, and understood in the past (before or without the deep and wide integration of CTs in our social lives) reflects the best, only or "real" meaning of empathy. This tendency, especially with respect to questions on the improvement or decline of empathy, grants "empathy without technology" with normative authority. Even though the meaning and status of empathy in moral theory is debated in academia, in society this concept holds normative power (see Chapter 3). As such, the way empathy is understood is not value neutral and has societal implications.

Furthermore, the impact of CTs and the desirability of the status quo can be different for different communities. A consideration of diversity is due, so as to not perpetuate historical inequalities by considering desirability only with regards to the

experiences of a majority or dominant group. Additionally, the experience of empathy itself can be quite diverse. Empathy is often associated with specific behaviours, both to express empathy and to interpret the state of the other. This narrow approach is already problematic as it does not account for expressive diversity, for example neurodiversity (Chapter 3) or cultural diversity (Broome 1991). Limiting our definition of the concept to specific experiences and ways of expressing empathy, has undesirable consequences considering its normative connotation. It also limits the imagination for different/new ways to express empathy and interpret others' experiences through technology - especially if such evaluations are to be used for recommendations for policy, technology design, or societal change.

To summarise, the three trends in conceptualising empathy I aim to avoid are individualism, conceptual rigidity, and overlooking diversity. I will continue with the virtue approach to empathy developed in Chapters 4 and 5 with the aim of doing so.

6.2.2. Empathy as a virtue

While empathy is often not conceptualised as a virtue explicitly, it is predominantly *used* in a similar vein. It is something often ascribed to character, a "trait" one can have more or less of, and often considered something "good". In the previous chapter, I have set out a detailed account of what it would mean to understand empathy as a virtue, which I will shortly summarise here. Two common associations with empathy are:

(1) a sense of *sharing* an experience, identification, with an other
(2) the ability to take a *different* perspective, recognising the distance between oneself and an other.

Notably, both associations are not entirely appropriate, because in reality our experiences partly overlap, but also partly differ. It can be challenging to properly attend to other subjects as subjects with their own experiences and relate them to one's own subjective experiences – i.e. to navigate intersubjectivity. There are human tendencies to take either 1) or 2) to the extreme. Namely, to attend to others' experiences by projection, disregarding differences, or to stigmatise, discriminate and think in an in-group/out-group manner, disregarding similarities. To these vices I have referred as *proximism* and *distantism*, respectively. Both disrespect part of the other's experience and disturb intersubjective relations – an essential part of living well as a social being. As I have been proposing, empathy, understood as the balance between proximism and distantism, is *the virtue that allows one to appropriately attend to experiential differences and similarities between the self and others.*

As I've also discussed, a virtue can be conceptualised as being developed like a skill, to reach a moral goal (Stichter 2007). In the case of empathy, this (implicit) moral goal lies in respecting another as a subject with an experiential life world, one that partly overlaps but also partly differs from one's own (Zahavi 2022). Empathy can be developed, like a skill, through practice and refinement away from proximism and distantism. To understand what this means in practice, the societal context needs to be considered. Features of the society one lives in can alter in which ways a person is challenged in living well, and how one can overcome these challenges, what is realistic and actual in that time, and the skills or habits one needs to develop in relation to virtue (Kallenberg 2011). It is in these ways that a virtue approach allows us to critically consider the effect of CTs on empathy itself: how it changes the ways in which people are challenged to live well intersubjectively, and how it changes what it means to develop empathy, like a skill, in practice. Section 6.3 will discuss both aspects: how communication technologies change the society in which we are pursuing a Good Life (how the game works), and what it means for an individual's empathy (the players of the game).

This approach circumvents the concerns with other empathy conceptualisations raised before. It leaves more room for expressive and behavioural diversity. The focus is on the value of respecting experiential differences and similarities. This narrows down our understanding of empathy in its goal and value, while opening it up for a wide range of possibilities to approach it in practice. Whether specific behaviours, expressions, and practices are appropriate, has to be understood in a highly contextualised manner. The bone structure of the concept is the principle of balancing proximism and distantism, while the flesh is to be understood as embedded in and shaped by personal, interpersonal, and sociocultural context, moving away from both individualist and static takes on empathy This makes the concept more dynamic, which is needed in a rapidly changing technological world. Crucially, this concept of empathy is explicitly normative, it being a virtue, and so can be appropriately used as such.

6.2.3. Communication & technologies

To recall, empathy is a virtue that allows one to appropriately attend to the other's experiences. In order to attend to another's experiences appropriately and respectfully, one needs a conception of this experience to start in the first place. The paradigmatic way in which this is achieved is through communication. Communication is understood here as the exchange of signals between subjects. This

exchange can be done through spoken language, bodily gestures, but also the exchange of pheromones or noticing the speed of someone's heartbeat. This is an extremely broad understanding of communication[19]. Communication technologies (CTs) are technological artifacts that mediate communication understood in this broad sense. Some examples are social media, e-mail or video chat. Another group of CTs that I will sometimes use as an example in the exploration of empathy is alternative and augmentative communication technologies (AAC), a range of technologies designed to assist people whose daily communication needs cannot be met with the use of speech[20]. All these technologies can play a role in what (kind of) access we have to another's life world. And as such, it can facilitate or undermine our abilities to empathise, as well as influence the readiness to empathise itself. Communication skills and the skill aspect of empathy as a virtue are deeply related in that sense. Good communication skills can help one to make sense of another's life world and appropriately attend to it, so be empathetic. However, communication skills are not to be conflated with empathy. For example, outstanding communication skills may be used for manipulation or in another non-empathetic way. By the same token, very poor communication skills don't signify a lack of empathy, though they can stand in the way of even the best intention to empathise. Note that not only one's own skills can stand in the way of communication, but also the context in which one empathises, the medium used to empathise, the other's skills for reciprocating communication, and many other factors. Correspondingly, technologies can mediate communication at various levels and in various ways.

6.2.4. Technological mediation

This brings us to the notion of technological mediation. To set up for an investigation of technology mediated empathy, both at the level of individual users and society as a whole, I will shortly introduce a postphenomenological approach to technological mediation and the notion of multistability. This is supplemented with an emphasis on the explicit consideration of diversity.

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19 I am not endorsing that communication should be understood this way, but only clarifying that this is meant with communication in the context of this chapter.

20 This definition of complex communication needs (CCN) might also need a revision, as, through the wide implementation of communication technologies, an argument can be made that almost no one can meet their daily communication needs through the use of speech anymore. However, this should not trivialise the experiences of AAC users – so another way to refer to CCN may be due.

Postphenomenologist Don Ihde (1990) described different ways in which technologies can mediate between a human's experience of and relationship to the world. To shortly summarise, a technology can be embodied by a human (embodiment relationship), a human can interact with a technology like it is a quasi-other (alterity relationship), a technology can mediate a human's interpretation of the world (hermeneutic relationship), or the relationship with the technology remains unobtrusive unless something happens to make its presence explicit (background relationship). Other possible human-technology relationships have been identified since (for example Verbeek (2008)) but they are not directly relevant for the discussion at hand.

Directly relevant, however, is the hermeneutic human-technology relationship, which refers to cases where the technology provides a way of accessing and interpreting information about the world – for example a thermometer. In the case of CTs, they mediate hermeneutically *between* people. As discussed in the previous subsection, they can mediate how the expressions of one person get interpreted by another person. When communications are bi-directional, the interpretation of an expression shapes the reaction of the other person in turn, which then affects how the first interprets the response, and so on.

From the perspective of a single actor, developing the practical skills needed for using a technology might involve a kind of alterity relationship[21]. One needs to learn how to "instruct" a technology to "help" get across a message. These different relationships CTs can have with users will be considered in analysing how CTs can mediate empathy. This is not to say that these are the only possible human-technology relationships for CTs, but these are the ones mainly focused on this chapter in reflection on empathy. Chapter 7 will also explore the embodiment relationship.

A different way of conceptualising technology mediation is not at the level of individual human-technology relationships, but at the level of a sociotechnical network. Rosenberger (2014) argued for the importance of complementing mediation theory with an outlook on the relationship between technologies and wider societal and political systems and practices. This is in line with the notion of virtue I use for empathy, not only considered as part of a life narrative, but as situated in a meta-narrative the life is lived in (Chapter 5). So, in section 6.3, the investigation of technologically mediated empathy will consist of two parts: micro and macro.

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[21] Communicating with an artificial agent like a chatbot would also classify as an alterity relationship, but in this chapter, I mainly focus on technology-mediated communication between humans.

Crucial for an assessment of both levels, technologies can be used for *different* purposes and in different ways – but not just *any*. They can constitute different relationships with their users, and play different roles in a sociotechnical network, depending on how they are used or implemented but also depending on what their own features afford (Rosenberger 2014). The technology itself brings about certain possibilities for its use and obstructs others. For example, you can't use a calculator to iron clothes. However, you can use it to calculate how many seconds there are in a day, or to jokingly spell out some words when you hold it upside down. This phenomenon is referred to as multistability[22]. As such, we see that both technology *use* and technology *design* play a role in what a technology can bring about, the good and the bad. That is why, to understand how CTs can mediate empathy, it is needed to consider how *features* of a CT itself can support or undermine empathy and how CTs impact what users need in order to *use* the CTs virtuously.

Importantly, a consideration of diversity and (in)equality is needed with regard to differences in experiences of technology mediation between users (Rosenberger 2014). Alper, Katz et al. (2016) suggest that research pursuits on adolescent media and CT use typically focus on the user experience and behaviour of a specific demographic, while projects focusing on other communities through a lens of intersectionality and diversity demonstrate how heterogeneous experiences of technology mediation can be across identities. To relate this back to one of the concerns raised before, when investigating technology mediated empathy, it should not be assumed that experiences of empathy (with or without technology) are uniform. Variability within the status quo and in changes brought about by technologies needs to be considered. This includes recognition of diversity in individual human-technology relationships as well as consideration of inequality on the societal level.

6.3. How communication technologies change empathy

Using this multi-layered methodological approach, I will now explore how CTs mediate empathy - first on a micro-level and then on a macro-level. Throughout this analysis, I will use various examples of CTs. However, each specific technology requires its own dedicated research to investigate its relation to empathy. Hence, in

[22] To clarify, this chapter focuses on CTs in the sense of their use for communication. Multistability in the sense that some technologies originally meant for communication that can be used for art, for example, is out of scope. Instead, the multistability of interest here is how technologies can play different roles within or for communication.

these illustrations I cannot do justice to the complexity of each individual technology. Instead, the examples are meant to clarify specific elements of technology mediated empathy. By using a variety of examples, I hope to demonstrate the multiplicity of ways in which CTs change empathy and how this theoretical framework is applicable to a wide range of technologies.

6.3.1. Micro-level (how CTs change the players)

I will start with an exploration of what it means for an individual who uses CTs to connect to others to be empathetic and develop empathy – how CTs change the players. The term individual does not refer to an isolated concept of an individual, but a relational individual, i.e. an individual who stands in relation to other individuals. CTs can mediate your experience of another, and at the same time mediate the other's experience of you. In this analysis of technological mediation of empathy on a micro-level, I will explore how CTs can mediate different aspects of empathy as a virtue as discussed in the previous chapter: the moral commitment behind empathy, skills to put this to practice, and the development of the virtue over time.

6.3.1.1. CTs and the readiness to empathise

To recall, empathy qua virtue involves that it can be developed like a skill to embody a moral goal and put it into practice. In the case of empathy, this means being *committed* to appropriately attending to experiential differences and similarities between the self and others. In practice, this translates to a *readiness* to approach the other as a subject and not as an object and recognising that their experience is partly the same and partly different from yours. CTs can obscure or highlight this goal. Technologies can mediate how we experience another, and how we interpret them (hermeneutic relationship) – as such they can mediate whether and to what extent we experience them as an experiencing subject in the first place, and to what extent we recognise their experience as related to our experience.

An essential difference between CT mediated and non-CT mediated interaction that is often proposed to disrupt empathy is physical distance - the possibility of interaction in the absence of each other's body and a shared environment. Bodily absence in communication is not new, recalling letter exchange, for example. However, the integration of CTs has, for example, increased the prevalence of communication across (literal) distance, including frequent new social connections. The disembodied nature of online communication has been proposed as a reason for

the severity of online hate speech and bullying compared to how people would talk to each other offline (Marin 2022). The absence of the other's body and a shared environment could promote distantism – disregarding the subject status of the other and the shared humanity.

However, the relationship between empathy, embodiment, and technology might be more nuanced. Lucy Osler (2021) argues that we should acknowledge a form of digital bodily presence when interacting in digital spaces – which would facilitate the possibility for online empathy[23]. Osler calls attention to the difference between the objective body and the expressive body. When communicating online, the other's objective body, the flesh and blood, is indeed not directly present to us. However, she argues, we can perceive the other's expressive body. For example, she claims that our speech is also part of our expressive body – and so is writing texts. When we text with someone, we typically attend to the words and emoticons that appear on the screen as expressions. This is to say, we see and read the words, but our attention and intention is directed at what the other is trying to express. Similarly, when someone speaks to us "in real life", we don't attend to the words as audio (with a certain frequency spectrum and rhythm), but to the person who is producing this audio, and the meaning behind their expressions. This implies that we *can* perceive the other as an expressive embodied subject, even though their objective body is not perceptually accessible to

[23] As empathy means something slightly different in the phenomenological tradition (that Osler engages in) than in my virtue account of empathy, I need to clarify how these different meanings of empathy relate to each other to justify the application of Osler's arguments to my own. In phenomenology, empathy refers to our perceptual access to another's experience Zahavi, D. (2010). "Empathy, embodiment and interpersonal understanding: From Lipps to Schutz." Inquiry **53**(3): 285-306.. An important characteristic of a phenomenological account of empathy is the idea that a part of another's experience is directly perceptually available to us through one's expressive body. This is in contrast with the idea that another's experience is hidden inside the other's body, and we can only have a conception of it indirectly, through inference. According to phenomenologists, this is not an apt description of how we experience and attend to other subjects. However, while not completely hidden, this direct way of experiencing the other's experience is not complete and always reliable. This complicates the relationship between this idea of empathy and morality Zahavi, D. (2022). Empathy, Alterity, Morality. Empathy and Ethics: 489. This is where this approach to empathy contrasts with mine. My account of empathy is inherently moral and normative – rather than a description of how empathy is experienced. However, while seeing how phenomenological empathy differs from virtue empathy, we can use insights from the former to have a more detailed understanding of how we experience another as an expressive subject and what role technology can play in this, as this is fundamental for putting one's commitment to empathy into practice.

us. The claim made here is that perceptual access to the objective body is not *required*[24] for attending to another as a subject.

Actually, in some cases the absence of the objective body and a shared physical space may be beneficial. Features of bodies (for example gender, race, perceived attractiveness, disabilities, etc.) and environments (for example a doctor's office) may introduce an interpersonal imbalance that can affect how we attend to experiential differences and similarities. Let's take a doctor-patient relationship[25] as an example. A recent study explored the effect of technology mediation in the form of teleconsultations on the patient's experience (Grīnfelde 2022). The research suggests that the absence of the doctor's office did indeed remove a part of the power imbalance typical of doctor-patient relationships, empowering the patient, and supporting empathy. While this is an example of a physical environment, note that features of digital environments (for example algorithmic bias) could also negatively impact relational power dynamics.

Not all CTs are used in an online environment. For example, AAC technologies are typically used in a shared physical environment. Comparing technology versus non-technology mediated interaction here paints a different picture. Communicative disability can pose an asymmetry with regards to perceptual access to each other's experience between individuals. This may promote either distantism in the form of stigma or othering, or proximism in the form of projection and wrongful assumptions about the other's experience. Technologies that mediate self-expression and thus support such perceptual access, can enable empathy as such (van Grunsven and Roeser 2021). While this is predominantly empowering, technological dependence and limitations may also induce stigma and othering (Donaldson, corbin et al. 2021).

To conclude, CT mediated communication does not necessarily preclude the possibility of approaching the other as a subject and having the readiness to empathise.

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[24] Osler remarks that we need to be careful with assuming what kind of access to the other is required for empathy, considering ableist implications. For example, claiming that seeing another's facial expression is required for empathy (note the term "required" – not "can be helpful"), would rule out the possibility of empathy by blind people. A similar thing goes for hearing tone of voice and deafness. She also remarks that while CTs may limit our perceptual access to another, having more details does not necessarily have to be better, and she takes sensory overwhelm (as particularly common for autistic people in face-to-face social engagement) as an example.

[25] Empathy is particularly important in this context for effective treatment and wellbeing, but also challenging Howick). There is a power and knowledge imbalance, where the patient is in a vulnerable position. Additionally, a healthcare professional may require slightly more distantism compared to a non-professional context, while not going too far in this direction.

However, it can hinder or support this. The readiness to empathise is not to be considered a given. With and without technological mediation, humans don't always attend to each other empathetically. Still, CTs can work along or against human limitations and problematic tendencies, by either facilitating perceptual access to each other, or obscuring the other's status as an expressive subject.

6.3.1.2. CTs and skilfulness in empathy

Having the readiness to empathise is one thing (and, as discussed above, CTs can mediate this in various ways), but putting this into practice is another. While we may not *need* specific ways of perceiving the other, as just has been discussed, changes in what we do and do not have perceptual access to requires some adjustment and development. For this it is important to recall the deep relationship between empathy and communication skills. To recall, empathy cannot and should not be reduced to communication skills because of its distinct moral dimension and status as a virtue. That being said, communication skills are important to put empathy in practice as they facilitate a conception of another's experience, which is needed for empathy. Depending on the specific technology and the corresponding technology-specific skilfulness of an individual, CTs may improve or reduce one's sense of perceptual access to another's life world. Technology mediated communication requires different skills than communication that does not involve CTs. Note that these new skills do not replace traditional communication skills. Rather, one needs to skilfully adjust to different modes of communication and ways to try to attend to other's experiences. As discussed earlier, some may find this more difficult than others (as is the case for other communication skills), changing the landscape of communicative advantages or disadvantages. For example, challenges in navigating new technologies and the digital divide do not only introduce all kinds of practical limitations in today's society, but also impose disadvantages in how to practice and develop skills needed for empathy in this context. And vice versa, for others historical disadvantages in this domain may be relieved by the increasing significance of CTs in how we connect to one another.

There is also an aspect of skill in effectively communicating empathy and making the other feel empathised with, and this as well may require new skills to be developed around CT use. Though, whether the other actually feels empathised with depends on more factors than just the individual, as discussed in Chapter 5. It requires meta-intersubjectivity, which is an understanding of the other's understanding of you (Gillespie and Cornish 2010). As such, skilfulness of both interactors is at play, as well as contextual factors. New shared norms and conventions can be helpful to navigate

this meta-intersubjective practice, while also skilfully individualising empathic responses and dealing with potential idiosyncrasies.

6.3.1.3. CTs and developing empathy

So far, we have discussed in this section how CTs can impact the readiness to empathise, and how to put this into practice through skill. I will continue with a reflection on how CTs can mediate the process of developing and refining empathy. Like any virtue, empathy can be developed over time through self-regulation towards a moral goal (Stichter 2007). For empathy, this means recognising tendencies or instances of proximism or distantism, learning from them, and making adjustments accordingly. CTs can mediate such self-reflection and –improvement in different ways, again some positive and some negative. New sensibilities may need to be developed to recognise mistakes. For example, subtle cues of discomfort by the other may get lost – or actually get enhanced when users feel more empowered or safe to stand up for themselves and others using CTs. In general, there is a significant challenge as the variety of modes available for communication is increasing, requiring a more complex development of new skills to not only improve but to keep up with our empathic abilities in practice. This in itself can be limiting, anxiety-inducing and demotivating. Some level of confidence and believe in one's ability to develop virtue is needed to adequately respond to and learn from mistakes towards improvement (Stichter 2020).

The confidence to recognise mistakes and having a feeling of ability to improve is a feature of the internal learning environment (mindset, attitudes, beliefs, etc.). A feature of the external learning environment is for example how moral failure is dealt with socially. A safe learning environment, both internal and external, is essential for developing empathy and other virtues (Stichter 2020). This brings us to the next way in which CTs can mediate empathy. Namely, CTs can contribute positively or negatively to the environment in which the user is supposed to develop the virtue. Social (moral) accountability can be very beneficial to individual virtue development because it can help one recognise mistakes and learn from them. But if the execution and consequences of the social ascription of praise and blame are too harsh, narrow, or even unjust, this limits self-improvement and growth ('cancel culture'). Improvement requires recognising mistakes, making changes accordingly, and this in turn requires trying new things to improve for the better. What a virtue approach shows us is the importance of social and emotional safety as conditions for moral

progress. To be clear, this is consistent with and even encouraging of practices of social accountability and feedback, *if* established in a constructive and just manner.

There are also ways in which CTs can positively contribute to such an environment. To provide an example, the "Am I the Asshole" subreddit provides a platform where individuals can anonymously share a story where they might have been in the wrong and ask the community for feedback and moral insights. This way, not only the poster can learn from the answers provided by the platform users, but others can learn from the mistakes and improvements made by others from reading them. The anonymity and openness (almost anyone[26] can post or comment, as long as you can access the platform) could not be created without the mediation of CTs. Without anonymity, the social implications of sharing such a story might be restraining, and without this openness the diversity of perspectives represented in both the stories and the comments would be limited. In general, CTs can provide us with more diverse stories to learn from – inviting us to develop empathy across the borders of our physical social environment.

6.3.2. Macro-level (how CTs change the game)

CTs have been incorporated to such an extent in our daily lives, that they have considerably altered our communicative and social practices as well as the social fabric of our society. The way CTs have changed the context we live in poses new challenges as well as opportunities to empathise – they have changed the game.

In this section I will discuss technological mediation of empathy on a macro-level. CTs are an integral part of the system in which we connect to one another, mediating the kinds of relationships we have, who we are able to connect with and how. It can be easier to cross geographical and cultural boundaries, reducing perceived distance. The human population has become more interconnected – a phenomenon sometimes referred to as Global Village. With the alleviation of practical barriers for connection, the scope of our social world has drastically changed, and thus how to navigate it virtuously has as well. I will expand upon this in what follows.

[26] It needs to be noticed, however, that not ANYONE can participate in these practices. Consider for example access to required hardware, internet, basic digital literacy, language barriers etc.

6.3.2.1. CTs and interconnectivity

As we can connect with more people, we are confronted with more diversity. While human diversity has not necessarily increased in itself, it has become a more salient aspect of social life, and with it has the importance of challenging the so-called similarity bias. This bias refers to observations in empirical research according which people tend to feel more with people who they have more in common with (Bloom 2017). An explanation given for this tendency is that, evolutionarily, empathy has had the function of promoting altruism and protection within communities, contributing to survival of the community and its members (Preston and De Waal 2002). However, in this narrative, empathy refers to something like emotion contagion, projection, or identification. This is not in line with a virtue approach to empathy[27]. Rather, this is closer to proximism. A lack of such identification, what is observed more often towards persons considered "out-group", is distantism. An alternative interpretation of these empirical observations of similarity bias, is that humans have the tendency to be somewhat proximistic in-group and distantistic out-group. Relying on projection and identification to attend to intersubjectivity might actually be quite appropriate in homogenous relations. In other words, you might be quite accurate in projecting or simulating another's experience if that person is a lot like you. However, if we would want to expand our in-group to the whole widely diverse human population, these strategies do not suffice. Mechanisms of projection, identification, and emotion contagion have become more unsatisfactory and problematic. An undesirable alternative is distantism – considering those we cannot relate to through identification as out-group – as seen in phenomena like polarisation, fragmentation, and discrimination. These phenomena are of course not new. But the interconnectivity facilitated by the integration of CTs can amplify the salience of existing human vices of proximism and distantism and make empathy more challenging in daily life.

CTs glue different networks together, creating a bigger network which CTs are a part of. However, rather than promoting connection, CTs can just as well play a role in division between subnetworks. Recall the notion of multistability. Human beings

[27] To clarify, the majority of empirical research done on empathy has a descriptive approach, while I argue that empathy is a normative ideal. Humanity consists of both virtue and vice – so descriptive empirical research does not actually capture "empathy", but a realistic intertwinement of empathy, proximism, and distantism. It is important to recognise the difference when engaging with empirical findings. They can give us insights into tendencies to vice (proximism, distantism), how we can overcome such tendencies and develop and refine empathy, and specific technologies can relate to this.

are not necessarily *automatically* emotionally equipped to properly navigate such a diverse network. Specific elements of some CTs, like social media algorithms rewarding emotionally triggering content, may support a divisive version of the sociotechnical system rather than one that facilitates empathy (a similar argument has been made on critical thinking and social media in Steinert, Marin et al. (2022)).

6.3.2.2. CTs and empathic equity

CTs might also remove barriers for expression and recognition of historically marginalised groups, for example AAC technologies (van Grunsven and Roeser 2021). The new ways of expression that these technologies afford can be empowering for both majority and minority, facilitating communication, supporting expression and understanding, and providing new opportunities for relating to another's life world. Another way in which CTs can be of particular benefit for minorities is the notion of interconnectivity mentioned before and the broadening of the "in-group". The assumption that in-group relationality can be achieved on the base of projection and identification presupposes a specific kind of privilege, namely fitting in to the norms and identity of the community. While interconnectivity for many people introduces more differences, it can also provide a way of finding similarity for those who fall outside the local norms. Consider, for example, experiences of online community building with regards to gender and sexual minorities (Cavalcante 2019, Hiebert and Kortes-Miller 2021), religious minorities (Bahfen 2018), and racial minorities (Correa and Jeong 2011). As discussed before, CTs may promote both connection and division in our social landscape. Existing social disparity is an important factor to take into consideration when investigating how CTs mediate sociality on a community level (on an individual level as well, as has been discussed in section 6.3.1).

6.3.2.3. CTs and social norms around empathy

Next to dealing with more diversity in life worlds in our social networks and environment, there is more diversity in the *ways* in which we can make sense of another's experience. Different modes of communication require different skills for expression and interpretation. In addition to skills such as reading facial expressions, body language, and tone of voice (and expressing yourself in a way another can apply these skills to), skills such as text messaging, the use of emoticons and memes, and understanding of other technological communicative devices are needed. For some this might be a challenge, for others these skills might be easier to learn than the ones

historically needed for effective communication. Societal expectations of mastery over these skills might shift. For example, would it be fair to expect everyone to be able to read facial expressions – an often-used indicator for empathic ability (see Chapter 2) - but excuse people for not being skilled at using emoticons? Or vice versa? What would this mean for older generations? Or for autistic people, whose empathic abilities might have been overlooked (Stenning 2020)? Such changes in social norms and expectations could increase or resolve existing inequalities[28].

To summarise, communication technologies have changed our social landscape. They have widened the scope for potential connection, as well as for ways to connect. This introduces new moral responsibilities and challenges as well as opportunities for empathy. This is reason to re-appreciate the importance of empathy as a virtue in our society, how it is developed, and how we evaluate praise and blame towards (shortcomings in) empathy. For example, to what extent do we have the duty to change the way we approach intersubjectivity? And to what extent should this be an individual or societal endeavour? Encouragingly, next to new challenges and problems, there are also new opportunities to empathise with people we otherwise wouldn't have known about, and to develop and refine our empathic abilities with the help of CTs.

6.4. Towards a more empathetic future

As CTs pose both challenges and opportunities for empathy, we need to reconsider the way we think and talk about empathy; what it means, and how it is achieved. As demonstrated in section 3, CTs can mediate empathy in various ways and at various levels. In many of these dimensions, both positive and negative impact of technologies are possible. For example, a CT can encourage overcoming similarity bias as well as reinforce it. And, while CTs may remove some power imbalances, they may also introduce new ones.

To recall the notion of multistability introduced in section 2.4, technologies can bring about different uses or programs, but not just *any*. Both specific features of the technology itself, as well as the way it is used and implemented, play a role in the resulting sociotechnical system. The way a technology is designed can invite or entice

[28] Another example is that for international CT mediated communication English is often used as a common language. To participate in this new social environment, being able to communicate in English, next to one's native language, is a requirement. This disproportionately puts native English speakers to an advantage, as well as people in non-English speaking countries who have received high quality language education.

users to use it a certain way and discourage or obstruct others. At the same time, within the restrictions and affordances brought about by the technology, users can have some freedom in how to use it, and to the extent of these possibilities ("ought implies can"), some responsibility to use it virtuously – and in the context of this chapter; empathetically. Moving towards an empathetic technological future means both designing technologies that support rather than hinder empathy as well as users developing empathy in the current sociocultural CT mediated context.

While bringing about opportunities and new possibilities, CTs can also crucially hinder empathy and endanger societal cohesion – supporting division and polarisation. Both technology design and user behaviour may benefit from a general cultural shift towards more awareness and appreciation of empathy and its challenges in a CT mediated social world. This would support empathic technological innovation, as well as the conscious development of the virtue by users. In this section some possible future steps will be considered for different sectors/actors.

6.4.1. Innovation, design, and implementation of technology

The way in which CTs are designed can support or hinder empathy, by moving along or against tendencies towards proximism or distantism. While virtuous technology use is needed as well, technologies can make it easier or harder to effectively empathise and develop or refine this virtue. To move towards CTs that actually support empathy rather than stand in its way, empathy can be part of the design process in two (complementary) ways: design *for* empathy, and design *with* empathy. The first involves consciously using empathy as an evaluative and guiding factor in the design process, similar to other aspects such as safety, effectiveness, or sustainability. The second refers to the importance of empathy as a virtue for designers, engineers, and technology developers. I expand upon these two takes on how empathy can be integrated into the design process below.

6.4.1.1. Design for empathy

Because the specific features of a CT can make a difference in its mediating role in empathy, this can be reflected upon already in the design process, aiming for a technology that effectively supports rather than stands in the way of empathy. This is aligned with the idea behind Design for Values (similar to Value Sensitive Design, (Friedman 1996)) – referring to a process of actively implementing certain values in an innovation process (Van den Hoven, Vermaas et al. 2015). For this, one needs to

translate the abstract value concept to specific operationalisations, and then to specific technological features. The conceptualisation of technology mediated empathy developed in this chapter can be used to this end.

The diagram on the next page summarises the seven aspects in which CTs can mediate empathy – either positively or negatively, that have been discussed in section 6.3. These correlate with the different subsections, except for equality; a theme discussed throughout the analysis both on micro and macro level. Together, they provide a comprehensible roadmap to integrate empathy as a value into the design of a specific CT by consideration of its potential impact and use. Namely, this framework provides a starting point for sociotechnical imagination for the specific technology at hand. This involves creative imagination and reflection on potential future scenarios where the CT is featured in a sociotechnical system. This is the first step in translating the abstract concept of empathy to an operationalisation for the application to the specific technology, and then for specific technological features. It is likely that not every dimension is relevant for the specific CT. The answer to one or some of the questions may be "not applicable". However, these questions should invite critical reflection on the potential impact of the technology on various levels with regards to empathy. What they mean for a specific development, and how they would translate to specific design choices, should be considered on a case-to-case basis. Furthermore, though extensive, this framework should not be considered to be exhaustive and final. As the development of CTs and their impact on society continues, other dimensions may be discovered and explored.

To recall, empathy is conceptualised as the virtue of appropriately navigating experiential differences and similarities between the self and other. It is the balance between the vices proximism and distantism, and CTs can work along or against this in various ways. Conceptualised as an explicitly morally valuable phenomenon, it can be used to give guidance in a design process. Contrastingly, using conceptualisations of empathy with a descriptive behaviourist or individualistic approach, are not necessarily suited to use this normatively.

A technology designed for empathy acknowledges its user as a subject who relates to other subjects and recognises human tendencies towards proximism or distantism. It works against rather than along these vices and supports the user's readiness to empathise with other users. The first part of this statement may sound obvious; that the users are subjects. However, bearing it in mind explicitly can make a great difference. Consider for example when the users are reduced to being consumers or data sources to be used for personalised advertisements, and in that sense objectified.

This starkly contrasts to CTs designed to empower users to express themselves more effectively towards other expressive subjects. Of course, the first CT may nevertheless be used to empathically connect with other users, and the latter category could be used inappropriately (recalling the notion of multistability). However, this does not excuse technology developers from taking responsibility in working along or against empathy.

Design for empathy: a framework for reflection

Readiness	Does the technology obscure or highlight **the status of another as a subject**?
Development	Does it contribute to a **safe and constructive learning environment and culture** to develop and refine empathy?
Skills	What **skills** are **required** to successfully empathise using the technology?
Norms	Could this technology **change societal expectations/norms** on empathy?
Equality	Does the technology **relieve or introduce an asymmetry/imbalance** between users?
Equity	How are the **challenges and opportunities** for empathy with this technology **distributed** among the population?
Interconnectivity	How does it relate to **existing human tendencies** towards proximism and distantism like similarity bias **on a larger scale**?

6.4.1.2. Design with empathy

This brings us to the importance of empathy as a professional virtue in the field over CTs. This starts with where the previous section ended: approaching the end-users of the technology as expressive experiencing subjects, whose experiences are partly similar to and partly different from those of the designer's. A balance between proximism and distantism needs to be found here too. Consideration of the diversity

between users poses an additional challenge. There is not a single user who needs to be empathised with, but a (potentially) widely various range. Taking it even a step farther, the designer needs to empathise with empathising users (which could be considered "meta-empathy"). This means consideration of the experience of users trying to empathise with other users using the technology.

This is quite a big challenge, and presumably an impossible task to do alone. As I've suggested in Chapters 4 and 5, an important part of empathy is humility; knowing that one does not know the exact experience of another. In a one-to-one interaction, this involves asking questions, listening, and being open to what the other is expressing. However, this is simply not possible for each individual user in a design context. Various methods have been and are being developed in acknowledgement of this challenge[29]. User-centred design is an umbrella term covering all sorts of strategies that are being created to involve users in a design trajectory (Abras, Maloney-Krichmar et al. 2004). These methods range from performing interviews to better understand the user's context, desires, challenges etc., to participatory design methods, where users are actively involved throughout the innovation process as co-designers (Abras, Maloney-Krichmar et al. 2004), to meta-design approaches where users are involved even throughout the existence and use of the technology (Fischer 2003). These approaches do not only empower users, but they also empower designers with the opportunity to *be* empathetic towards users in their work, by providing access to the users' experiences. And through continuous practice, the virtue can be further developed over time. The framework developed in this chapter aims to support this development by providing an understanding of what it means to be empathetic and the roles CTs can play in supporting or hindering empathy.

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[29] The virtue approach to conceptualising empathy can be a valuable contribution to research on empathy in design processes. In their meta-analysis of how empathy is conceptualised and operationalised in design research, Surma-Aho, A. and K. Hölttä-Otto (2022). "Conceptualization and operationalization of empathy in design research." Design Studies **78**: 101075. stated that the ambiguity about how empathy should be understood affects this field as well. They identified five different general meanings of the term. Virtuous empathy maps onto a combination of three of them, namely: empathic orientation (the commitment to centralise the user experience), empathic mental processes (different ways to make sense of the user's expressions of their experience), and empathic understanding (accurately grasping their experience). The other two meanings of empathy they found in design research were empathic design research and empathic design action, referring to methods (doing research or undertaking activities, respectively) to gain access to user experiences. This is exactly in line with the approaches suggested here.

6.4.2. Empathic technology use

This section started with the notion that a mutual effort between technology development and technology is needed towards technology mediated empathy. For a CT to support and invite empathy with and between users, the exact design and implementation matters, but also the skills and intentions of the users. As discussed throughout this chapter, empathising with CTs requires skilfulness in the technology and new communicative practices. It requires the ability to navigate new ways of how other's experiences are (un)available to us. Continuous research efforts are needed to investigate new CTs and the specific skills they require from users, and how they can be developed. Empathy development in a technology driven world could be promoted and supported through education, policy, art, and other domains. To recall, this comprises of the readiness to approach other subjects *as* experiencing subjects, balancing between proximism and distantism, improving one's empathy over time through self-development, and using CTs accordingly.

6.5. Conclusion

In this chapter, I have explored how CTs can mediate empathy on various levels. I have used a combination of virtue theory, mediation theory, and an explicit consideration of diversity. I argued to understand empathy as the virtue to appropriately attend to experiential differences and similarities between the self and other, balancing between the vices proximism and distantism. Building upon the notion of multistability, CTs can work along or against empathy through a combination of how they are designed and how they are used. As such, both empathic technology use and empathic technology innovation should be promoted and supported. For the first, I have identified various ways in which CTs introduces new challenges as well as opportunities to be empathetic to one another. I have developed a framework consisting of seven points that require reflection in the design and implementation of a (new) CT.

7. AAC technologies: a case study for CT mediated empathy

7.1. Introduction

In the previous chapter, I explored various ways in which communication technologies can mediate empathy. I sometimes mentioned Alternative and augmentative communication (AAC) technologies as an example throughout. In this chapter, I will expand on this specific group of technologies as they are a particularly interesting case study for reflection on technological mediation, empathy, and diversity. Alternative and augmentative communication (AAC) technologies is an umbrella term used to describe all artifacts that can complement speech in daily communication. This term is typically used to describe devices that are being developed for people with alternative or complex communication needs (CCN), e.g. whose communication needs are not met through the use of speech in situations where the majority of people would not experience difficulties. As used in everyday communication, AAC technologies are intimately involved in the lives of their users and their communication partners.

AAC technologies have promising potential in supporting empathy, by facilitating communication between people with and without CCN, and assisting in making the experiences of a minority group heard, understood, and empathetically attended to. However, these technologies can also reinforce narrow communication norms, stimulate "othering", and in other ways, form barriers toward empathy. To recall, the virtue of empathy allows one to appropriately consider experiential differences and similarities in an interpersonal relationship. Empathy is the balance between the vices of proximism and distantism. Proximism, to repeat, refers to disregarding experiential differences, failing to consider that your experiences are not the other's and vice versa. For example, it might be hard to understand that while talking is to you the most effortless and efficient way to communicate, this communication mode might not be available to someone else, might take some more time and effort, or might just not be preferred (even when assistive technology is available). Distantism, to repeat, refers to the overlooking of experiential similarities. Consider, for example, the stigmatisation, tokenisation, or even dehumanisation of people with speech impairments – where shared humanity and the depth and richness of experiences are overshadowed by the salience of differences.

The goal of this chapter is to analyse different dimensions of AAC-mediated empathy on different levels (individual and societal), both positive and negative. Exploring AAC-mediated empathy can highlight or reveal dimensions of the potential and risks of AAC technologies. This Chapter will put my normative account of empathy (Chapters 4 and 5) and theoretical framework for analysing technologically mediated empathy (Chapter 6) developed in this dissertation into practice, by using these approaches to evaluate AAC technologies.

This chapter, in contrast to the others, involves an empirical component. The previous research was based on argumentation and literature study. This case study *allows and asks for* a more detailed examination of the complexity of lived experiences with particular technologies. To this end, I have collected testimonies from AAC technology users regarding their experiences of AAC-mediated empathy. The methodological approach will be described in detail in section 7.2.2. Collecting this data was challenging, and the dataset does not have the size (length and width) I envisioned as in alignment with methodological standards of similar research with other target populations. This is a known barrier to including individuals with CCN in research (Dee-Price, Hallahan et al. 2020). However, insight in first person perspectives[30] is indispensable for achieving the goal of this chapter. Without the perspectives of these marginalised communities, I, as a researcher who does not have CCN, would need to infer such experiences, which would not allow me to *try* to adequately "attend to experiential similarities and differences", i.e. to empathise with the people this research primarily concerns (see Shew (2020). Lack of representation of people with CCN is a broader problem in research, not only research that directly focuses on this community and its needs (Taylor and Balandin 2020). Not including the experiences and knowledge of people with CCN in academic knowledge generation (which, for example, has a bearing on how we understand "communication" in general (van Grunsven, van Balen et al. forthcoming), can be considered another example of epistemic injustice. Recall the exclusion of autistic empathetic experiences in academic understandings of empathy (Chapter 3). As researchers, we need to be wary of proximism and distantism, acknowledging the diversity in human experiences, the limitation of our own understanding of the world, and the impact this has on our concept and theory building. Throughout the analysis, I supplement the testimonies I have collected with existing literature on AAC user

[30] Note that this does not necessarily need to come from a self-collected dataset. Consider, for example, using other research on first-person experiences, testimonies found in books, blogs, or social media content etc.

experiences. These insights are not meant to be exhaustive, as the community is widely diverse. Instead, they showcase examples of experiences with AAC technologies and demonstrate the complexity and variety of such experiences.

After the description of my methodology, I will start with a discussion of AAC technologies and empathy on the level of individual relationships (micro-level). Starting with a dissection of the different human-technology relationships that AAC technologies constitute, I will explore the first three aspects of technology-mediated empathy as discussed in Chapter 6: readiness, development, and skill. Then I will continue with AAC technologies and empathy on a macro-level. After providing a critical account of AAC as situated in society, I will consider the latter four aspects of technology mediated empathy: social norms, equality, equity, and interconnectivity. The analysis will draw on insights from user experiences throughout. I will end with insights and recommendations for the design, implementation, and use of AAC technologies that support empathy. In the end, I will also touch on some other ethical concerns that came to the fore throughout the analysis of AAC technologies through a lens of technology-mediated empathy.

7.2. Approach

In the analysis I will apply the theoretical framework developed in the previous chapters, while making use of empirical insights from both literature and individual testimonies that I collected for this chapter. In this section I will briefly recap the theories and concepts that will be used and expound on my approach to collecting testimonial data.

7.2.1. Used theories and concepts

In the previous chapter, communication technologies were defined as technologies that mediate communication – the latter referring to the exchange of signals between subjects. This mediation can be understood both at the level of individual human-technology relationships, and at the level of social systems or networks. With respect to the former, I will again make use of the classification of individual human-technology relationships by Ihde (1990). In contrast to the previous chapter, I will here not only focus on the hermeneutic *mediation*, which is the most literal and directly relevant form of mediation for communication (and a common denominator for communication technologies), but I will also discuss the mediation relations of

embodiment and *alterity*[31]. Zooming in on a specific group of technologies in this chapter, a more fine-grained analysis is possible *and* warranted to dissect the multilayered nuances of the relationships AAC technologies bring about. The impact of these relationships on identity, skill development, and the context of an interaction can present ways in which AAC technologies shape empathy. Zooming out to the societal sphere, I will explore the ways in which AAC technologies can mediate social norms and expectations, and ways in which this affects the inclusion or exclusion of the widely diverse CCN community.

The normativity in my analysis stems from the use of empathy understood as a virtue (Chapter 5). In the previous chapter, I explored in which ways communication technologies, through their mediation of communication, can mediate empathy. I identified seven aspects of empathy that can be impacted and shaped by communication technologies: the readiness to empathise, the development of empathy, skills needed for empathy, societal norms around empathy, relieving or introducing asymmetries between subjects, the distribution of opportunities and challenges to empathise, and working along or against tendencies towards proximism and distantism on a societal scale. Working with my account of empathy as a moral concept, a virtue, I will show that these ways of technological mediation have important ethical implications. Along this framework the mediation of empathy by AAC technologies will be explored, using the conceptual analysis of AAC technological mediation combined with empirical insights from literature and user testimonies.

7.2.2. Collection of user testimonies

User testimonies were collected to learn from people's experience with their AAC devices, their relationship with it, giving and receiving empathy, how certain design features play a role in this, and their recommendations for future improvements.

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[31] Note that typically four (and not three) human-technology mediation relationship types are being discussed Ihde, D. (1990). Technology and the lifeworld. . Bloomington/Minneapolis, Indiana University Press.. However, the fourth, the background relationship, is not significantly relevant to AAC technologies and their mediation of empathy.

7.2.2.1. Method

It is of utmost importance to include first-person lived experiences of AAC technology use in research on the technology itself (Taylor and Balandin 2020), but this comes with unique methodological challenges (Blackstone, Williams et al. 2007). In live interviews using AAC technology, fatigue is a significant challenge, which is why an asynchronous interview method was chosen here instead (Beneteau 2020). This allowed respondents to formulate answers to the questions at their own pace[32]. The participants had the option to submit their answers to the question either via email or in a secured cloud[33]. Both options were provided because, while using a cloud is favoured for security reasons, it does require more technical skills which compromises the accessibility of participation[34]. To accommodate expressive flexibility and diversity, the participants could not only answer the questions in written form (English, Dutch, or Flemish), but also send videos, pictures, artworks, etc. The interview consisted of 8 open questions (with sub-questions) that covered various topics that emerged from the theoretical exploration of the topic. Abstract concepts and theories (such as "human-technology relationships", and "empathy") were translated into practical questions without jargon. The questions covered the topics:

(1) interactions with, via, and through AAC technology in daily life with regards to empathy,
(2) experience of human-technology relationship with the AAC device,
(3) ideas for improvement of the technology, innovation process, and implementation.

7.2.2.2. Recruitment

Next to challenges in methodological design, recruitment is another significant barrier for the inclusion of AAC users in research (Taylor and Balandin 2020). The AAC technology company *AssistiveWare* and the Dutch-Flemish division of ISAAC (International Society of Alternative and Augmentative Communication)[35] shared the

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32 Yet, fatigue was still reported as a challenge in contributing to the study by one of the participants.

33 The participants could let their preference know on the consent form, which also explained the risks of using email.

34 Accessibility was a core value in the methodological approach. Yet, note that the method used here still required internet access and literacy (English or Dutch).

35 Other (similar) parties and media were contacted as well in (unsuccessful) attempts to increase visibility of the study.

study with their network and on social media. This support was provided without compensation or interest, so as to not compromise the integrity of the study. Those who were interested could contact me via email and received more information about the study, both in a written document and animated video, along with a consent form. In total, this research collected the stories of 5 individuals, one of them formulated by the mother of the user (so not a first-person account). The testimonies vary in degree of detail and extensiveness. To recall, these stories were collected to provide examples of experiences that, together with other literature, supplement the used theoretical frameworks in the conceptual dissection of AAC technology mediated empathy. The collected data were not meant, and do not function, as a representative sample of the experiences of the widely diverse AAC technology user community.

7.2.2.3. Ethics

The research was reviewed and approved by the Human Research Ethics Committee of Delft University of Technology. Additionally, the data collection and management strategy were in line with the commitments of the program this research is a part of: *Ethics of Socially Disruptive Technologies* (NWO: 024.004.031). Each participant provided written consent through a form that provided various options for participation. To accommodate diversity in knowledge acquisition and interpretation, the explanation of the research and the various options on the consent form were provided both in written text (in English and Dutch) and an animated video (in English).

7.3. AAC and empathy: micro-level

In this section and the following (7.3 and 7.4), I will perform the analysis of AAC-mediated communication with the approach that was just described. I will present this in two parts: first at a micro-level, and then at a macro-level – similar to the analysis in the previous chapter. As such, I will start this section with exploring how AAC technologies mediate empathy through a lens of different individual human-technology relationships (embodiment, hermeneutic, and alterity) in 7.3.1. Then, I will use these insights to analyse how these technologies can impact the first three dimensions of the "Technologically mediated empathy" framework from Chapter 6, namely: readiness to empathise, empathy development, and the skills needed for empathy in 7.3.2.

7.3.1. AAC and human-technology relationships

As used in everyday communication, AAC technologies are intimately involved in the lives of their users and their communication partners. AAC technologies mediate people's interactions with the world and each other in various ways. They shape the daily lives of users by enabling (hopefully) more comfortable exchanges, and they shape the experiences of others by facilitating more diverse relations, and by creating new intersubjective experiences. This complex interaction can be dissected by analysing different human-technology relationships, as introduced in section 7.2.1. These relationships can be relevant at the same time and are deeply intertwined, but unravelling them separately exposes different opportunities, challenges, and responsibilities that come with AAC technologies.

7.3.1.1. Embodiment

"It's part of me. As time has gone by, I've seen it as my voice more and more." - Sharon[36]

AAC technologies can be experienced as a part or extension of the body, in other words, as embodied. An often-used metaphor for AAC technologies is that they give a "voice" to their users. In the case of speech generating devices this is quite literal. In the proverbial sense this means that these devices empower users in a way to (finally) get heard, understood, taken seriously, and included in society[37] (Donaldson, corbin et al. 2021) (this will be critically reflected upon later in section 7.4.1). It is useful here to recall the distinction between the objective and expressive body as introduced in the previous chapter (Osler 2021). Even when an AAC technology is not actually implanted or connected to one's objective, physical body (which is only rarely the case, for example with brain-computer interfaces designed for communication), they can be experienced as part of one's *expressive* body.

Being someone's voice is quite a big ask for a technological device, dare I say, a large responsibility (also for those who design it). For an AAC device to be "up to that task", the output the device can produce - its expressive power - needs to do justice to what and how the user wants to express themself. To give two examples of possible limitations indicated by the users who I interviewed:

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36 The names of the interviewees are fictional.

37 Interestingly, in the Dutch language "voice" is the same word as "vote" (= "stem").

> "What would make it so that I can identify with my device more would be the possibility to change the intonation on the basis of the context. For example, if I want to tell something joyful, it is less personal if my device neutrally recites the message. Theoretically this is possible: there are three versions of [my device's] voice: a neutral one, a happy one, and a sad one. As far as I know there are no programs that make use of this, but I think it should be possible to indicate which emotion belongs to which part of the message. One could work with emoticons for extra accessibility." - Sami

And:

> "I'm limited to the words/phrases programmed into my device by other people; […] I can say more with [this device] than with other AAC methods because I can build my own sentences vs. only choosing from predetermined options." - Sharon

Specifically relating to speech generating devices, it's important to note how someone's voice is closely related to one's identity – both in how we are perceived by others and in how we perceive our own expressions. This is the case both for natural speech (Johar 2016), and technologically mediated speech through AAC (Wickenden 2011). This highlights the importance of diversity in the voices one can choose for a speech generating AAC application. In the interviews that I conducted, the factors of gender, age, clarity, dialect, uniqueness (no other people in close surroundings using the same voice), and habit/familiarity were raised as influences on voice setting preference. To exemplify the last factor, consider the following observation from a parent of an AAC user:

> "When after having used the voice of Clara[38] for years I suddenly put a child's voice in [the device], she didn't use the [device] anymore. Only after a few weeks I understood that she experienced it like – this is not my voice! When I put Clara back in, she started using her device again." – Robin (parent)

To summarise, AAC technologies can be intimately intertwined with users as part of their expressive body ("voice"), constituting an embodiment relationship.

7.3.1.2. Hermeneutic

As introduced in Chapter 6, a hermeneutic human-technology relationship refers to cases where the technology provides a way of accessing (and interpreting) information – for example a thermometer. In the case of AAC technologies, they mediate the way

[38] Fictional name

of accessing each other's (and even one's own) experience. They function like a translator, mediating between and attempting to close a gap of communicative difference. The technology mediates how the expressions of the user get interpreted by the communication partner – and in turn, the interpretation of the message expressed using AAC shapes the reaction of the conversation partner, and then how the user interprets the message of the other, and so on. Also, one might use the technology in a different way when interacting with someone who has never communicated with an AAC-user before than with someone who is using such a device as well, or who prefers other modes of communication than speech. This relational nature of the hermeneutic role of AAC highlights the skills needed to adequately use the device to interpret expressions and access each other's experience (more on how these skills relate to empathy in 7.3.2). These skills are significantly different from what is generally understood as "communication skills", which can lead to specific challenges – for example, a communicative skill in this context turns out to be the ability to not form predictions or interpretations of expressions in the way one is used to without this technological mediation.

> "Sometimes people misinterpret what I think or how I feel when I'm using the [device]. I think it's because my body and my expressions don't always match what I'm saying. Sometimes people assume they know how I feel based on what my body is doing and they don't listen to what I'm telling them. One downside of the [device] is that it's hard to be expressive with it—for example to sound angry, sad, excited, etc." – Sharon

Efforts in technological development as well as training for communication partners and user support often focus on exactly this relationship type – as this is in principle it's primary goal. However, there is a danger in understanding this goal in too narrow of a way. Regarding the operationalisation of what AAC technologies aim to achieve, a recent meta-analysis showed that the "success" of AAC technologies is predominantly measured by focusing on the ability to make requests (Aydin and Diken 2020). What is considered effectiveness in an AAC "intervention" is limited to this specific skill. This extremely narrow view of communication lacks much of what it means to be a communicative being, and what is involved in interpreting each other's expressions. Relatedly, it threatens to dismiss potentially effective AAC technologies with significant communicative power if and when those technologies don't meet the performance standards for the making of requests. Beyond this narrow approach to the hermeneutic capacities of AAC, these technologies may introduce innovative and creative ways for expression and interpretation – different ways of constituting a communicative relationship. Crucially, the way the success of an AAC is measured

and written about by researchers can and does impact governmental and/or health insurance policy by informing technology assessment and appraisal, which in turn, can result in people being denied AAC devices (Romski and Sevcik 2018).

To conclude, the relationship between AAC technologies, users, and communication partners can also be described as a hermeneutic relationship, mediating the exchange, interpretation, and formation of expressions in a complex, dynamic, and bidirectional manner. What this means for empathy will be explored in section 7.3.2.

7.3.1.3. Alterity

An interesting finding of a set of interviews conducted with users of AAC apps was that they used the app for other things than mediating communication with others, for example planning or playing (Hartmann and Sheldon 2020). Users' relationship with the technology cannot be explained merely in terms of the embodiment and hermeneutic relationships. Some experiences with AAC technologies are better classified as an alterity relationship. This relationship is intimate, but in a different sense than with the embodiment relation – for it captures a relationship with the device as a "quasi-other" who is experienced as in a way separated from the user. Alterity relationships in this context are at play in processes of learning how to use the technology, playing with it, or using it for other purposes such as planning. It also exists when actually using the device in a conversation – when using the interface.

> "People expect that you can adequately use such a device right away. But that is of course nonsense! A newborn also doesn't reply, right? You also talk to them for months until they say mama. People don't realise that a [AAC] vocabulary is a completely new language."
> – Robin (parent)

One of the interviewees described their experience of the AAC device as a neutral *tool* they can *use*, rather than as a part of the self and their voice (in contrast to what others expressed).

The *alterity* relationship highlights a certain vulnerability of the user when using the device. The user needs to learn how to effectively use the device, and then trust the device to do what it is supposed to, that it responds to the user's input correctly and as expected.

7.3.2. Empathising using AAC technologies

The previous subsection dissected how AAC technologies relate to users and communication partners in various ways. Building on this analysis, I will now explore what this means for the virtue of empathy. I will make use of the framework developed in the previous chapter consisting of seven questions that encourage deliberation on different aspects of how empathy can be mediated by technology both at the micro and macro level. I will address the first three questions here, those that are particularly connected to the micro-level, and the latter four in section 7.4.2 – after providing an account of AAC as situated in society in 7.4.1.

7.3.2.1. Readiness: How does an AAC technology obscure and/or highlight the status of another as a subject?

A commitment to being an empathetic person starts with the readiness to attend to another subject as a subject with their own lived experience. Sadly, being approached with this intent is not always self-evident. Particularly, compromised ability to express oneself conform the dominating communication norms can be confused with diminished subjecthood (Van Grunsven 2020). The inner life worlds of minimally or non-verbal individuals are often overlooked in their richness and passed off as minimal, simplistic, underdeveloped, and considered in likeness to non-human animals[39] rather than fellow humans (van Grunsven and Roeser 2021). By their way of translating non-verbal expressions into more generally understood modes of expression, AAC technologies can provide others a new type of (mediated) access to the inner worlds of users and reveal their subjecthood there where it was considered hidden and unrightfully called into question before. This can promote the readiness to approach AAC users empathetically, in cases where this wasn't done without these technologies.

On the flipside, AAC can also stand in the way of this readiness. Stigma around technological dependence, ableism, "cyborg" imagery, and distancing of the unknown, can prevent people from approaching users as fellow subjects (this will be explored further in section 7.4.1.2). Less extremely, a medicalised and technicalised focus on AAC design and implementation can reduce users from "someone" with a complex and rich inner live world and a desire to connect, to "something" with needs to, for example, make requests (as discussed before). Vice versa, such a narrow vision

[39] This is not to say that the life worlds of non-human animals are to be passed off as minimal, simplistic, or underdeveloped.

of communication, which reduces the significance of communication to the making of requests to others, also inadvertently reduces communication partners to "something that can fulfil my needs". Instead, AAC technologies should encourage a readiness to empathise to and from communication partners. What this entails in term of specific technical features is to be explored in the context of a specific AAC technology (to recall, AAC technology is a widely diverse umbrella, including picture boards as well as high tech applications), its implementation, and the experiences of users of the particular system.

7.3.2.2. Development: Does is an AAC technology contribute to a safe and constructive learning environment and culture to develop and refine empathy?

By facilitating new forms of communication, new connections, and new relationships, AAC technologies can support empathy development for both users and communication partners. However, whether these development opportunities are safe and constructive, hinges on the actual implementation. Stigma surrounding AAC use on the one hand, or pressure to use AAC rather than other communication modalities on the other, can compromise the quality of the learning environment (as will be discussed in more detail in section 7.4). Instead, with an open attitude towards communicative diversity, empathy development could be supported by AAC technologies by implementing ways of expressing and responding to feedback in the process of trying to empathically connect (i.e., ways to check with each other whether you understood each other correctly – see Chapter 6).

Let's consider an example of what this technological support of empathy development could mean in practice. While discussing this topic, one of my supervisors shared the following experience. Outside a grocery store, she encountered a young man who had a speech generating device attached to his wheelchair. With readiness to approach him empathetically, she asked him a question about his day. Knowing that it can take a while to generate a response with such a device, and the importance of patience and adjusting the temporal rhythm of conversation she is used to, she waited for him to respond for a while, uncertain about how long she should wait in the turn-taking process. After all, it could also have been the case that he did not want to answer the question, or he wasn't in the mood for making conversation. Staying there, waiting, would in that case be annoying, or even be perceived as intrusive. The feedback needed for putting her readiness to empathise into practice is challenged by the communicative difference as well as the actual "question-response"

interaction. In the design of an AAC device, *this* need (for both the empathiser and empathisee to be able to signal and recognise communicative feedback) should be considered in addition to the need to form an answer. Consider for example a pulsating light on the AAC-user's interface that could easily be turned on (and off) to signal that you are (or are not) busy generating a sentence. Such a seemingly minor design choice could inform the other communicator whether the most empathic thing to do would be to wait and listen or to walk away.

7.3.2.3. Skills: What skills are required to successfully empathise using the technology?

As discussed in section 7.3.1.2 and 7.3.1.3, it takes time and practice to learn how to adequately use an AAC technology. It can be compared to learning a new language. Practically speaking, users need to learn to turn what they want to express into a message (7.3.1.3) and communication partners need to learn how to interpret these messages and engage in this type of conversation (for example, being patient towards a slower pace) (7.3.1.2). Importantly, close communication partners like family, caregivers, close friends, typically also need to learn how to use the technology as a user, something referred to as "modelling" (Kent-Walsh, Murza et al. 2015). Modelling is essential in the initial learning process as well as in facilitating mutual connection and understanding in sharing this technologically mediated communication mode (Sennott, Light et al. 2016). These skills are often reported as quite difficult to learn, with a steep learning curve, and they often benefit from assistance from specialists and practitioners (Kent-Walsh, Murza et al. 2015). To recall, while I have argued that empathic skills are not to be reduced to communication skills, communication skills are an important foundation for putting the readiness to empathise into practice in an actual interaction (Chapter 6).

So, AAC technology requires some particular skills that need to be developed in order to correctly interpret expressions. This development cannot rely too much on typical communication skills and norms, as they may not be appropriate (as was expressed by Sharon, in the example of reading facial expression). This challenges some social norms, and even some views on empathy, where inferring someone's experience with only little information is actually praised. Instead, I emphasise the importance of humility in this regard (Chapter 4). As we are building towards a more inclusive society, the experiences and communication styles we encounter become more diverse – and relying on projection becomes more problematic (Chapter 6). This is exactly showcased here with regards to AAC mediated communication.

7.4. AAC and empathy: macro-level

AAC mediated empathy is not merely a matter between the technology and the user. The users, and the technologies, are embedded in a society – in which the technologies are being developed and used. In fact, without a society in which social life is so profoundly dependent on speech, would these types of technologies even exist? The landscape of AAC would also likely look a lot different if significantly more (consider half of the population, as a short thought-experiment) would be minimally or non-verbal. AAC technologies bridge a communicative gap – and without differently situated partners, there would be no communicative differences to bridge between[40]. Viewing the technology from this societal relational perspective, rather than an individual one, reveals that the technology is being "used" by both the actual "user" as well as by the communication partners (Blackstone, Williams et al. 2007).

As I argued in Chapter 5, virtues – and hence also empathy - are to be understood as situated in a meta-narrative, with certain norms and practices, and challenges to live a Good Life (Kallenberg 2011). So, to understand AAC mediated empathy, it is important to discuss how AAC technologies are placed in society and how people with CCN are situated in this meta-narrative. This includes a consideration of power dynamics, distribution of opportunities, and inclusivity. In previous chapters I argued against views of empathy that have a narrow approach to how to communicate empathetically, and who gets to be seen as empathetic and as worthy of being empathised with. Empathy contributes to the Good Life through facilitating good relationships with other subjects. Societal exclusion, ableism, and stigma can stand in the way of such relationships, and of living well *together*. Developing empathy includes overcoming such barriers to living well, and AAC technologies can play a part in this bigger picture. How they can do so (both positively and negatively), is exactly what I will discuss in this section.

7.4.1. AAC in society

In this section, the relationship between AAC technologies, users, and society will be explored through a critical (neuro)diversity and disability lens. This analysis will provide insights in properties of the meta-narrative that shape AAC mediated communication and empathy. By providing additional means for expression to a marginalised community, AAC technologies can play a critical social, political, and

[40] This reasoning is in line with the social model of disability, in contrast to the medical model.

ethical role (van Grunsven and Roeser 2021). At the same time, they can be used to enforce certain communication modes onto people, disregarding their personal preferences, experiences, and communicative identity. Viewed this way, AAC technologies can be both disempowering and empowering. Additionally, these technologies can have a stigmatising or distancing effect by *underlining* differences, demarcating between those who can speak from those who "need a technology to speak for them". Section 7.4.1.1 will explore how narrow and exclusive views on "communication" itself can limit the potential of AAC technologies in facilitating empathy, by promoting proximism – overlooking or even disrespecting communicative difference. Section 7.4.1.2 discusses stigma and the lack of visibility, phenomena that support distantism – disregarding what is shared across these communicative gaps.

7.4.1.1. Narrow views on communication

This section includes research that is included in a forthcoming book chapter (van Grunsven, van Balen et al. forthcoming)

The dominant narrative in literature on AAC technologies and speech/language/communication impairments, focusses on the use of these technologies for intervention: using technology to improve communication skills (Romski and Sevcik 2018). Considering the importance of communication in relationships, and the importance of relationships for wellbeing, this narrative does not seem to be morally problematic at first glance. As discussed in Chapter 6, communication skills are closely related to empathy in the sense that they contribute to putting the commitment to empathise into practice in an actual relational encounter. However, using "improvement of communication skills" as the major evaluation criterion in AAC design raises a question with strong ethical implications in practice: what *are* "good" communication skills? While there are general norms on operationalising "communication skills" in research and clinical practice, these norms are contested by the neurodiversity paradigm, questioning the normative value awarded to the neurocognitive makeup of the majority. This concern is similar to and intertwined with the problems discussed in Chapter 3 regarding the narrow operationalisations and "neurotypical gatekeeping" of empathy. This critical lens destabilises normative assumptions on how one *should* (be able to) communicate and questions the desirability of creating technologies to this specific end.

This concern is tangible in the experience of AAC users. Donaldson, Corbin, and McCoy (2021) investigated experiences of autistic adults who use AAC technology to

complement speech in daily life[41]. One of the trends they identify in their stories was an experienced pressure to use *speech* for communication rather than other modalities of communication:

> "Growing up I primarily tried to use nonspeech forms of communication when I could but everyone else pushed for speech, things that remained I was relying on [was] photo[s], music and my senses." (Donaldson et al. 2021)

> "I learned to outwardly appear to speak well because there was a lot of social pressure to do so, but I was frequently being forced to speak when it was difficult." (Donaldson et al. 2021)

It is a common but mistaken view to assume that speech, when made available through technology, is experienced as the preferred or even superior mode of communication for its users. This discloses the normative bias towards speech with regards to communication (technologies).

> "What makes communication successful for me is when I can use the method that works best for me in the moment, and when the other person just accepts that method." (Donaldson, corbin, and McCoy 2021)

> "I love multimodal communication. My brain loves it. It is so much easier to communicate with multimodal communication. It is hard to try to force myself to one communication method when I can use multiple. Life is easier with multiple. Different methods have different advantage[s]." (Donaldson, corbin, and McCoy 2021)

Recognising how different people's relationships to speech can be and how their communicative preferences can differ, asks for shift away from AAC understood as intervention to make up for a communicative lacking towards an appreciation of AAC as a valuable addition to one's communicative toolbox. This is not to undermine the value of language and speech, but to stress the value of *what is being expressed,* regardless of the modality used to express it.

The focus on intervention is not only founded upon a questionable normative framework, but also misses some opportunities AAC technologies can bring. Namely, to actually improve the quality of life of communicative minorities if designed for daily life assistance, rather than intervention (Shane, Blackstone et al. 2012). Furthermore, AAC technologies can enrich our understanding of communication. It does so, for example, by making available, through the use of these technologies - testimonial input

[41] In contrast to the large body of research on AAC and autism that focusses on the use of technology as an *intervention* for developing and/or improving speech in minimally verbal *children.*

of communicative minorities (Dee-Price, Hallahan et al. 2020, van Grunsven and Roeser 2021).

7.4.1.2. Stigma and visibility

In the previous part, I have discussed how AAC technologies may reinforce larger scale proximistic tendencies – overlooking differences in how we experience and relate to the world and others. Similarly, AAC technologies may underscore distantistic tendencies considering stigma around not only having a disability in the first place, but also using assistive technology (Parette and Scherer 2004). Stigma has been described as follows: "A person who is stigmatised is a person whose social identity, or membership in some social category, calls into question [their][42] humanity – the person is devalued, spoiled, or flawed in the eyes of others" (Major, Steele et al. 1998). This account of stigma is closely linked to distantism – something that marks difference stands in the way of experiential similarities to be acknowledged and attended to. Using an AAC device can visibly set the user apart from others. It signals "disability", which, in a sociocultural environment that has ableist inclinations, can stand in the way of empathy (Parette and Scherer 2004). This can create a social barrier towards using such technologies, despite the opportunities they provide (Donaldson, corbin et al. 2021). Parette and Scherer (2004) argue that it is important to note that the experience and impact of stigma may differ between people and communities. For example, women, older people, and racial minorities, are less likely to receive technological aids and proper training, circling back to less representation and prejudice. Furthermore, social acceptability is typically prioritised more by individuals with collectivist cultural values, which in Western society are often minority groups (Parette and Scherer 2004).

The distantistic effect of AAC technologies is sustained by lack of visibility (most people never or rarely encounter AAC technologies, or even are not aware of their existence) and general knowledge about assisted communication. General attitudes towards disabilities are affected by both the amount and nature of contact one has with disabled individuals and information about disability and assistive technologies (Parette and Scherer 2004). In general, most people don't have experience with communicating with an AAC device, and don't get to develop the communication skills needed to do so (modelling, adjusting to a different temporal rhythm, etc.). This was also brought up in the first-person testimonials that I gathered:

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[42] Pronouns changed for inclusivity.

> "It takes time to communicate; people don't always recognise that I'm the one talking and that I'm talking to them; […] verbal communication is very fast-paced and people aren't used to waiting more than a few milliseconds for an answer, especially when they're busy or in a hurry; participating in a group conversation is hard because everyone has to stop and wait for my answer, otherwise the conversation moves on before I can finish putting an answer together." – Sharon

This lack of familiarity and know-how in AAC mediated communication can stand in the way of facilitating mutual understanding, and instead stimulate reliance on biased assumptions and prejudices. As such, the technological mediation that is realised (recall the notion of multistability), is not of a bi-directional hermeneutic nature that facilitates connection, but rather of an estranging one. This has also been discussed in the previous section as a challenge on a micro-level. Crucial for this section, is how the lack of societal visibility and culturally distantistic tendencies towards disability at the meta-narrative level affect the realised impact of AAC technologies with regards to empathy.

Subsequently, AAC users are often underestimated in terms of intelligence and the complexity of their life worlds (Blackstone, Williams et al. 2007, Donaldson, corbin et al. 2021, van Grunsven and Roeser 2021). This was also mentioned in the testimonials of my interviewees:

> "People are often under the impression that I am also cognitively disabled because I can't answer their questions right away. Because of this, people can address my assistant instead of me, or when I am out on my own, they can head-on ignore me. Personally, I try to find compassion for those people because they likely never have been in contact with AAC-users." – Sami

> "This stigma caused that my child was underestimated for years, and that her [AAC] device was only used a few times for two years. That there were no investments in teaching communication. That she was literally trapped in her body for years and looked around and stared. 'She must be tired'… no, she is bored to death!" – Robin (parent)

The second quote highlights the importance of properly training teachers on AAC, to both support children who use AAC as well as assisting their classroom peers in understanding AAC, developing diverse communication skills, and supporting empathy development (Parette and Scherer 2004).

There is a vicious cycle in the problems raised in this section. There is a lack of visibility and awareness that contributes to stigma, and in turn, this stigma creates social barriers towards visibility and awareness, particularly for individual users. This

underscores that this is a macro-level challenge. Fittingly, the following plea was made by one of the interviewees:

> "If schools for special education would not be built somewhere in the woods or behind sports fields, but at the heart of society. If in the building for special education there would also be a school for children with a typical development. Inversed participation is what I always call that. So that society also comes into contact with these children. That they don't shy away from a computer on a wheelchair. And there has to go much more attention to AAC in all schools. Because as long as there are no special AAC schools for non- or minimally verbal disabled children, you have to approach it differently. Modelling helps. That everyone knows how it works and keeps using it." – Robin (parent)

7.4.2. AAC Technologies and empathy in society

With this critical depiction of AAC technologies as situated in society in mind, let's explore the four pillars of technology mediated empathy which are at play on a macro level – the meta-narrative. These involve social norms on empathy, increasing or relieving inequalities, equitable distribution of challenges and opportunities to empathise, and facilitating interconnectivity in a wider network. In this subsection I will address these topics, again by answering the questions formulated in Chapter 6.

7.4.2.1. Norms: How could AAC technology change societal expectations/norms on empathy?

AAC technologies can challenge some believes or assumptions directed towards people with CCN and their inner lives, intelligence, emotional complexity, and even subjecthood. By facilitating possibilities for new relationships in different ways, they can also diversify ideas of who can be empathetic, who gets to be empathised with, and how empathy can be put into practice. This destabilises previously held expectations on how to be empathetic. As also mentioned about other aspects of AAC mediated empathy, these opportunities might be lost in the face of societal stigma and lack of proper integration and visibility in wider society – reducing its potential to destabilise potentially problematic societal norms and assumptions towards people with CCN.

Recall the issues raised earlier in this dissertation on the neurotypical gatekeeping of empathy. Operationalisations of empathy that primarily focus on verbal expression of empathy, would write non-speaking people automatically off as non-empathetic. Again, the virtue approach to empathy developed in this dissertation provides a framework to make sense of idiosyncratic ways of expressing empathy. This also goes

for using AAC technologies to put the readiness to empathise into practice. Currently, to my best understanding (from literature and talking to practitioners), little to no explicit attention goes to the use and development of AAC technologies for empathy – both with respect to receiving and expressing it. Of course, this does not mean that it is not being used to this end in practice.

7.4.2.2. Equality: Does AAC technology relieve or introduce an asymmetry/imbalance between users?

In their core functionality, AAC technologies do (aim to) address an asymmetry in terms of expressivity and communication. There is a privilege attached to the ability to express oneself vocally and verbally in line with the existing social norms on communication, and as such there is a power imbalance between people with and without CCN. It is a big stretch to say that AAC technologies relieve this imbalance, as we have seen in the many barriers and challenges experienced with AAC mediated communication – both on personal and societal levels. However, they can be a valuable step towards equality by opening up possibilities for connection and inclusion (Donaldson, corbin et al. 2021).

One of the interviewees, Sami, pinpointed an asymmetry introduced by AAC technologies: familiarity with the technology itself. He approaches people who make assumptions about him with compassion as they probably have no experience with people who communicate like he does. This circles back to the problem of visibility and awareness of AAC, that needs to be improved to support the impact these developments can have towards equality. Consider for example better inclusion in public spaces, mixed education, and media representation.

Another element of imbalance exists within the widely diverse group of AAC users. There can be a variety of reasons to use AAC. Some use it part time, as they use it to complement speech, while some use it as their primary or sole mode of expression. For some, learning how to use the technology, much like learning a new language, is easier than for others. To accommodate different challenges and needs between AAC users, a diversity of technological tools and support is needed.

7.4.2.3. Equity: How are the challenges and opportunities for empathy with AAC technology distributed among the population?

This can be understood as the question what role the technology plays in "who gets to be empathetic and who gets to be empathised with". Both challenges and

opportunities are most significant for the direct user group and their close environment. Challenges include the aforementioned difficulties in learning how to use the technology and incorporating it in one's life, and opportunities include improved social connections, communal and/or societal inclusion, and many others. When AAC technologies are designed and implemented such that they primarily uplift and empower users, AAC technologies can contribute to empathic equity. Those less directly affected by AAC technologies (the majority of society) also are provided with new opportunities to connect and empathise – namely with the CCN community through the use of AAC technologies. They are also presented with some challenges and burdens in learning new modes of communication (skills) and potentially questioning previously held norms and beliefs. It is important to keep in mind the fairness in distribution of opportunities and challenges in light of currently existing imbalances. Arguably, the burden of adjustment presented to people without CCN brought about by AAC technologies can be justified with an argument for equity, and the privilege associated with speech.

A big caveat to the distribution of empathic opportunities facilitated by AAC technologies is the accessibility (or lack thereof) of these technologies and support. Especially high tech AAC can have significant monetary value, accompanied by potential costs for implementation/learning support, AAC friendly education, coaching etc. Depending on the healthcare (insurance) context, this can unevenly distribute the opportunities and challenges that AAC technologies bring about among people with CCN. Additionally, social stigma can affect some cultural, religious, geographical, socioeconomic etc. communities more than others (Parette and Scherer 2004). Further concerns include inaccessibility on the basis of physical properties, cognitive abilities, education, and location.

7.4.2.4. Interconnectivity: How does the technology relate to existing human tendencies towards proximism and distantism like similarity bias on a larger scale?

As discussed at several points throughout this dissertation, people can have the tendency to be proximistic towards others who are considered to be in-group and be distantistic towards those who are not. In relation to AAC, we can see this tension regarding in- or exclusion. On the one hand, there is a stigma attached to not only having CCN in the first place, but also to using AAC technologies for communication. On the other, attempts towards inclusion risk proximism in relying on projection on the actual lived experience, and desires and needs of AAC users – as we have, for

example, seen in assumptions on preferring speech over other modalities, or a narrow focus on making requests. However, AAC technologies can help navigate the balance between these options, as they can make the experiences of users better available (to understand and get in touch with in the first place) to the rest of society. That said, the impact of this is contingent on people's readiness to empathise with these experiences, and to see both similarities and differences with their own experiences.

7.5. Implications and recommendations

7.5.1. Designing AAC technologies for empathy

The development of AAC technologies has promising potential in supporting empathy, by providing means to facilitate the experiences of people with CCN to be heard and understood. However, critically exploring AAC mediated empathy brings to light pitfalls of AAC technologies, proximistic ones (for example enforcing narrow communication norms), and distantistic ones (for example stigmatisation). This relational perspective provides an alternative to individualist views that either burden the user with expectations to conform or estrange users from society. On the flip side, this analysis can help us understand the opportunities AAC technologies can bring in nurturing, facilitating, and supporting empathy. For example, they can help the user and communication partner to better access the experiential differences and similarities between them, where without these technologies this was a more a significant challenge. The actualised impact of AAC technologies is contingent on the actual design, implementation, and use. In this section I will summarise some takeaways from this chapter's analysis of AAC technologies through the lens of technology mediated empathy.

Firstly, it is key to approach (design, implement, accredit, reflect on, etc.) AAC technologies with facilitating *mutual understanding* as a primary goal. This may seem obvious, but it is valuable to make explicit. Some challenges concerning this goal are related to how the field of AAC technologies is embedded in the wider society, the meta-narrative. For example, specific social norms shape the way the technologies are designed, valued, and implemented in a limiting way (as discussed in 7.4.1). Another example of how this goal can be overlooked is when the functionality of the device is limited to the making of requests (as discussed in section 7.3.1.2). The actual impact of AAC technologies on facilitating *mutual* understanding is also limited by the relatively low visibility of AAC technologies and societal inclusion of the CCN

community. This contributes to underdeveloped understanding and skills in society to adequately use AAC technologies to connect with the experiences of their users (which in turn holds back societal inclusion, as discussed in section 5.2).

Next to a reframing of the goal of AAC technologies in general, and how they exist in society, a reframing is needed for the role of AAC technology in the lives of users. Instead of viewing AAC technology as a way to *survive* with (technology-mediated) *speech*, I argue it would be more helpful to consider *thriving* with (technology-mediated) *communication*. The shift from *speech* to *communication* in these sentences highlights that speech is one of various communication modalities available, and that we need to acknowledge the complexity and diversity in what is means to be a communicative being. The change from *surviving* to *thriving* calls attention to (implicit) ableist assumptions in AAC design and implementations – viewing CCN merely from a medical/deficit model of disability, overlooking concerns of social injustice, and a focus on wellbeing rather than conforming. In practice, this angle shift should invite a more holistic and contextualised view on the goal of AAC technologies, towards which design, policy, education, and support should aim.

As argued in chapter 5, empathy plays an important role in living well – so a focus on *thriving* with *communication* warrants a consideration of what empathy looks like when communication is mediated by AAC. The role AAC can play in empathy – including readiness to empathise, empathy development, and the needed skills – deserves more attention in research and practice. Consider the practical example discussed in 7.3.2 on adding a light that shows when someone is busy forming a sentence, helping the conversation partner to put the readiness to empathise into practice and navigating the communicative differences. In parallel, AAC mediated empathy deserves attention in work on empathy itself. Similar to what I argued in Chapter 4, our understanding of empathy needs to do justice to the wide diversity in experiences and ways to express them.

A concern that came up at various points throughout the analysis, and that was discussed more extensively in 7.4.1.2, is the vicious cycle of stigmatisation, lack of awareness and visibility, and societal inclusion. Stigma can stand in the way of AAC supporting the readiness to empathise. The aesthetic qualities of AAC devices can play an important role in how assistive devices are perceived (Parette and Scherer 2004), balancing visibility and stigma (see design Curtis, You et al. (2023) for an example of a participatory design approach to navigate this tension). Hopefully, because of the connections between these phenomena, this vicious cycle could be turned into a virtuous one. Awareness and visibility can contribute to a more diverse outlook on

communication, which can help people develop the needed skills to communicate via AAC, supporting societal inclusion of the CCN community, challenging ableist cultural tendencies, reducing stigma, and in turn making AAC – and their users - more accepted and visible in society (McNaughton 2019). However, effort is needed to initiate this shift and create momentum.

Lastly, when considering empathy in relation to AAC technologies, something that requires particular attention is the diversity within the CCN community. To effectively facilitate empathy, this diversity needs to somehow be accommodated, if not in the design of individual AAC innovations, then in the options available between different devices. For example, a functional and efficient user-interface is ideally optimised to the needs of the user (consider the alterity relationship). Considering differences in stimulus processing, it is unlikely that the same interface features will be experienced equally across neurotypes. As the target group for AAC technologies is even more diverse in terms of neurocognitive makeup than the general population, issues regarding technology designs and neurodiversity are amplified. Biased assumptions about autism and the potential capabilities of individuals related to communication and empathy can limit the options explored. To stress the danger in this, AAC researcher Mirenda (2008) writes:

> I think that it is not okay to get it wrong for even one person; when we talk about communication, we are talking about peoples' lives, no less than that – so there really are no degrees of freedom. If we get it wrong, if we miss the boat – people drown. (Mirenda 2008)

User-centred design approaches have, up to now, been developed, used, and validated for neurotypical people (Dalton 2013); (Motti and Evmenova 2019). As discussed in the previous chapter, designing for empathy not only requires empathy with users and a readiness to bridge the experiential difference between users (in this case, people with CCN) and designers, but also empathy with users using the technology to empathise with others and each-other – *meta-empathy*. This again forefronts the importance of including users as research and design partners (Beneteau 2020, Taylor and Balandin 2020), acknowledging the diversity within the user community, including neurodiversity (Benton, Vasalou et al. 2014, Motti 2019), and diversity in culture, gender, and age (Parette and Scherer 2004). Advances are being made in this regard in the interdisciplinary field of AAC technologies, which can even be an inspiration for other (communication) technology fields (van Grunsven and Roeser 2021).

7.5.2. Other ethical considerations of AAC mediation

The ethical concerns that can be distilled from the dissection of AAC technologies understood through a technological mediation lens provided in this chapter are not limited to empathy. While my focus is on empathy, I want to touch upon three additional concerns that came to the fore while doing this analysis, as I believe they are urgent matters and showcase the value of this theoretical framework in the ethics of technology in a broader sense.

First, the intimacy of an experienced embodiment relationship between an AAC device and its user might warrant a different outlook on AAC technologies and privacy. AAC-user and neuroscientist Alyssa Hillary (2019) explains how the device is an extension of their brain, in the sense that it contains everything they said, all the conversations, and their language preferences – which, as discussed in 7.3.1.1, has a strong relationship to culture and identity. This raises the question whether AAC devices should be protected under bodily integrity – viewing it as part of one's expressive body, rather than a technological artifact. Hillary (2019) explains that when used in intervention or educational practice, this is not how AAC devices currently get treated.

Secondly, viewing the use of AAC technologies through the lens of an alterity relationship, brings to the fore the user's *vulnerability* in engaging with an AAC technology. Acknowledging this vulnerability highlights the importance of various technological features; such as clarity, reliability, speed, sustainability, comfort, and versatility. Some specific examples of desirable features are: a long battery life, a clear volume control, limited sensory stimuli, and being able to use it when it rains (Donaldson, corbin et al. 2021). These are not to be considered "just" practical technical features, as they have an important ethical dimension: acknowledging the vulnerability of the user in engaging with the device, requiring a sense of trust in the relationship (of an alterity kind).

Lastly, AAC use (as of yet) requires a lot of effort and engagement – AAC devices are difficult to master, and even when adept to it, they take significant time and energy to create a message and express something. Other barriers to using them with ease are for example social stigma, pressure and impatience of communication partners. Removing these technical and social barriers to work towards a more frictionless relationship is desirable. However, removing *any* kind of friction and opacity might come at the cost of a sense of expressive agency, control, and privacy. Consider, for example, one's relationship to AI driven features that predict what you want to express

and *automatically* finish one's sentences. Rather than striving for a frictionless relationship, working towards a more *comfortable* functionality might be preferable.

7.5.3. Limitations and future research

While the discussion in this chapter was informed by user experiences through literature and collected testimonies, the testimonial knowledge included in this study is not exhaustive nor could I claim it to be fully representative – as the CCN community as well as the experiences of AAC usage are widely diverse. Rather, the testimonial knowledge detailed in this chapter provides examples for the conceptual dissection of the phenomena presented here, which in turn can be used to further explore this empirically. As discussed earlier, including AAC technology users in research comes with significant methodological challenges. However, first-person perspectives are of indispensable value in improving the design and implementation of AAC technologies, and translating the abstract recommendations made here into practical technological features or policies. Indeed, there are already many initiatives and methods to better include AAC users into research and design processes as primary contributors (Beneteau, 2020). However, AAC tech users are still systematically excluded from research that is not directly related to AAC but that does inform our understanding and our theories of communication and empathy (Dee-Prince, 2021).

7.6. Conclusion

In this chapter, I explored how empathy can be mediated by AAC technologies. I analysed experiences of AAC users through the lens of technological mediation, with a combination of literature and testimonies I collected myself. This analysis consisted of two parts: reflections on an individual and societal level. For the individual level, I discussed three different kinds of human-technology relationships related to experiences with AAC technologies, namely: embodied, hermeneutic and alterity. On the societal level, I discussed how social norms, visibility, and stigma play a role in the impact, potential, and risks of AAC technologies. Building on the insights from this analysis, I used the theoretical framework developed in Chapter 6 as a structure to map out different ways in which AAC technologies can mediate empathy. These considerations highlight the importance of examining AAC technologies not in isolation, but as part of a multilayered sociotechnical system, including the relationship with an individual user, with families, communities, and education systems, and with

society as a whole. In this dissertation I have engineered empathy to be a normative concept that can be used in ethics of technology. So then finally, from these perspectives on AAC-mediated empathy, I distilled some recommendations for AAC technology development and implementation.

8. Discussion

Let's very briefly recap the journey taken in this dissertation, throughout which I developed an account of empathy better suited for the 21st century, accommodating neurodiversity and how our sociality is more and more mediated by technologies. In Part I, I took a score of the existing ambiguities surrounding empathy as a concept in autism research and identified some issues with how empathy is often operationalised and measured. To address these concerns, in Part II, I developed an account of empathy that is explicitly normative and anti-discriminatory. I there argued to conceptualise empathy as a virtue, understood as the balance between proximism and distantism. Then, in Part III, I explored how communication technologies can mediate empathy on various levels – first in a general theoretical sense and then applied to AAC technologies. With this, all research (sub) questions have been addressed, and I will formulate answers to each of them in the conclusion. But before that, in this chapter, I will add some clarifications and nuances to the account of empathy developed in this dissertation.

First, I will engage with an extensive reply written by Dr. Colin Marshall to my article "Towards a clear and fair conceptualisation of empathy" in the journal Social Epistemology (which is a combination of the contents of Chapters 3 and 4). In his reply, he raised four challenges to my proposal to understand empathy as the balance between proximism and distantism, to which I will provide responses in section 8.1. Then, in section 8.2, I will share some additional thoughts on my account of empathy based on a few recurring themes in questions I have received from colleagues at conferences, meetings, etc. Specifically, I will provide a perspective on the relationship between empathy, sympathy, and compassion, and I will introduce a distinction between superficial and deep empathy. I will close off this discussion in section 8.3 with some suggestions for directions for future research based on the findings of this project.

8.1. Reply to "Towards a clear and fair conceptualisation of empathy"

This section is based on a published work: "Empathy as a Virtue: a Response to Marshall" (Bollen 2023). The text has been slightly adapted in style for consistency.

Colin Marshall wrote a detailed reply to my paper "Towards a clear and fair conceptualisation of empathy" in which he raised four challenges to inspire a discussion. I appreciate that the message on neurotypical gatekeeping in the context

of empathy (research) was received as clear and convincing. The challenges Marshall raised in his reply mainly regard my proposal on how to conceptualise empathy moving forward, in a way that is anti-discriminatory and explicitly normative. I am grateful that these challenges provided me with the opportunity to clarify some aspects of my proposal, which I will do in this response. To clarify, his reply was directed at the primary proposal in Chapter 4. Later, in Chapter 5, I work out a more thorough and intricate account of empathy understood as a virtue, but this account was not yet available to Marshall at the time that he wrote his reply. I will use some of the insights developed in Chapter 5 in my response to the fourth challenge raised by Marshall.

8.1.1. Challenge 1: Moralising *Empathy* in Academia

The first challenge concerns my argument to understand and use empathy exclusively as a moral concept. In paper (and in this dissertation in Chapter 3), I demonstrate how the misalignment between how empathy is used inside and outside academia is causing problems. While the concept of empathy holds a moral significance in society, inside academia it is used both with and without this connotation. To resolve this ambiguity, I argue that we should lean into the widespread normative connotation of empathy. In his reply, Marshall recognises this to indeed be a more feasible and realistic solution than the project to de-moralise empathy altogether, as attempted by, for example, Paul Bloom (2017) and Jesse Prinz (2011). However, Marshall wonders what this would mean for psychology as a discipline. Because "the very nature of their discipline stands in the way of psychologists using a moralising conception of empathy". After formulating this concern, he continued to answer this in a way that aligns with my stance on this. "Psychologists could stop using *empathy* altogether, and instead restrict themselves to transparently non-moral terms". As I wrote in Chapter 4 "The concept of empathy proposed here challenges some of the research currently being done on what is called *empathy*. Given the moral connotation and societal implication of the notion of empathy, one should be careful with using the term empathy when actually studying specific skills or mechanisms."

As discussed in Chapter 2, there are vastly diverging conceptualisations of empathy currently in use. Regarding methodology, I found significant gaps between what was measured and how empathy was conceptualised. In light of this, even without taking into account the patterns and problematic implications of *neurotypical gatekeeping*, it would make more sense to call reading facial expressions *reading facial expressions*, understanding and adhering to culturally specific social norms *understanding and adhering to social norms*, and emotion contagion *emotion contagion*. To use the term empathy for so

many different abilities and tendencies is confusing the field. Adopting a different terminology would not only be more accurate, appropriate, and clear but also remove the normative connotation that is associated with the term empathy from research that is supposed to be descriptive and neutral. Because, as Marshall acknowledges, even if academics use the term in a neutral non-moralised way, the impact of the research can have undesirable consequences. I recognise that the academy-wide change in terminology I suggest might be difficult to realise (even if it is more realistic than a society-wide change, as mentioned above), but I do believe that with growing attention to responsible research and societal impact, this argument may resonate with researchers – who most likely would not intend to contribute to conceptual confusion holding back scientific progress, let alone the ethical implications I address in Chapter 3.

8.1.2. Challenge 2: How Much of a Change is Bollen's Definition?

The next challenge concerns a comparison between my proposed account of empathy and other accounts. Marshall writes that he "suspects that a fair number of prominent extant definitions of *empathy* actually have the same, or perhaps even more, neutrality than Bollen's." He continues to provide two examples. The first is Bloom's non-moralised account "the act of coming to experience the world as you think someone else does", which is, Marshall states, arguably more psychologically permissive than mine – particularly related to my notion of *attention*. The second is De Vignemont and Jacob's account of empathy which aligns with affective sharing combined with care.

I first want to clarify that it was not my intention to develop an inclusive *neutral* account of empathy. On the contrary, my proposal of empathy is a normative ideal that, as Marshall writes at the beginning of his reply, "both neurotypical and neurodivergent people must work hard to realise". As such, my account diverges from Bloom's account in the sense that it is a moral concept – empathy is inherently good. As Bloom effectively argues in his work, the concept of empathy he works with is not necessarily morally good, and can even be problematic (Bloom 2017). My aim is not to make it inclusive necessarily, but to make it fair and clear in its normativity. The *exclusivity* of the concept is grounded in morality (it is praiseworthy to be empathetic), and not related to neurotype – which I would call discriminatory rather than exclusive. As I wrote in Chapter 4: "With anti-discriminatory I mean that while some people are more empathic than others, this should be evaluated only on directly relevant factors, and a concept of empathy should not invite or afford operationalisations that confuse this and are unfairly exclusive." So yes, my account of empathy is not neutral, and it

is not supposed to be. Yet, it is open to a diversity in how empathy is experienced and expressed.

Regarding the comparison to Vignemont and Jacob's account of empathy, a combination of affective sharing and care, the inclusion of care moralises the concept. Marshall suspects that the condition of care may introduce injustice in the account. However, I am not too concerned about this aspect[43]. Instead, I take more concern with the emphasis on affective states and the alignment of them between empathiser and empathisee. This poses very specific criteria on how empathy should be experienced – namely as an affective state that is similar to another's affective state. Even without neurodiversity in mind, if someone is angry because they were wronged, I would not consider sadness to be an inappropriate or unempathetic state in response to this anger – even though this is a different affective state. Also, neurodivergence can impact how emotions are experienced and regulated, so it is quite likely that when the empathiser and empathisee do not have the same neurotype, an empathic experience is not *similar to* the affective state of the empathisee. Therefore, I particularly take issue with the notion of *similarity* between affective states, in addition to the focus on *exclusively* affective states (as I also discuss in Chapter 4). Some people experience emotions more intensely than others, some are better at recognising them, or expressing them (in a way that others understand, according to social norms) etc. This may be associated with neurodivergence or not, but I would refrain from basing moral judgements on this itself. Instead, I argue such judgements should be based on the appropriateness of whatever is experienced as a balance between proximism and distantism. In fact, the focus on sharing affective states unfairly praises experiential appropriation (a form of proximism in my account).

Marshall ends this challenge by noting that one of the most important lessons in the paper is that "it's not enough to have an unbiased understanding of empathy itself – that understanding, together with knowledge of potential pitfalls, needs to properly shape the experimental methods used in empirical research". I full-heartedly agree with this statement. It is exactly because of this that I am wary of concepts of empathy that define it as either an *affective state* or a *cognitive endeavour* or *promoting prosocial behaviour* – as these invite or promote limiting operationalisations and methodological approaches. By emphasising that empathy is a moral concept, a virtue, which is to be understood in terms of appropriateness towards experiential differences and similarities, it is hopefully less tempting to use it in research that is supposed to be

[43] Unless this is then operationalised in limiting ways, as is sometimes done in the notion of *prosocial behaviour*, often associated with empathy (I will come back to this in response to challenge 4).

neutral and non-moral, as mentioned in challenge 1, and use methods to measure it that are exclusively tailored to neurotypical experiences.

8.1.3. Challenge 3: Why not Just Similarity?

The third challenge is of a more fundamental nature. Marshall wonders whether my account could be simplified by leaving out the notion of difference. Because "taking oneself to have a state that is similar to another person's state already implies a concern with difference". To this claim I would need to object. One can very well only attend to experiences that are shared, while not attending to experiences that are different. I agree that many accounts of empathy would call this empathy nevertheless, and I take issue with that. This supports similarity or in-group bias, where people attend more and care more about experiences of those more similar to them, and disregard experiences that are unfamiliar to them, as well as those who have them. This is clearly a problem related to neurodiversity, which has been debated as the *double empathy problem (*Milton 2012). But to provide a different example; some feminist debates and movements lack nuance in discussion of intersectionality – when what is being shared (being a woman) is attended to, yet experiential differences (age, ethnicity, being a cis- or trans-woman, cultural background etc.) are sometimes not attended to. It is simply not enough for me to rely on my own experience as a (cis-)woman and what I can *simulate* as a shared or similar experience to empathise with victims of transphobia. This is also where the notion of humility plays an essential role in empathy, which I will come back to later.

Marshall notes that my proposal might be radical, in the sense that "a person could attend to differences and similarities in experiences without having an experience that is at all similar to another person's". Yes, this might be a radical shift from some other notions of empathy, but morally speaking, I argue, a more appropriate one. This while, as I argue in the paper, retaining some core intuitions widely ascribed to the concept of empathy. Marshall provides the example of empathising with an octopus. He notes "I don't think we would normally call that kind of state *empathy*. But perhaps including such states is part of the revision to our understanding of empathy that Bollen is proposing. If so, then I think that revision (dropping any criterion of there being real or believed similarity/matching) would be worth putting front and centre." If someone would consider empathic attendance to octopus experience impossible, I would indeed disagree with them. However, I also disagree with the implication that this would drop "any criterion of there being real or believed similarity" – as I don't see reason to believe that there are not at all similarities between human and octopus

experiences, both being animals – sharing biological and behavioural characteristics (even complex social activities such as play) and having a shared environment. To be sure, a human-octopus relation has even vaster experiential differences than a human-human relationship. Which, given the similarity bias often present in human psychology, makes this type of empathy particularly challenging. Even still, attempting to establish empathy in this context I consider to be praiseworthy, and being distantistic towards non-human animals, of which the most extreme version (but unfortunately not uncommon) is objectification, I consider blameworthy. Interestingly, autism is sometimes associated with enriched empathy with non-human animals (Stenning 2020). This too sheds a different light on the appreciation of autistic empathy (or presumed lack thereof), as this kind of empathy is typically not included in empathy measures. Typically, concepts and operationalisations of empathy focus too much on similarity and thereby praise proximism, even when inappropriate, while excusing distantism. On both sides, this is morally problematic as it implicitly justifies in-group or similarity bias.

8.1.4. Challenge 4: Does Attention Imply Motivation?

The fourth and final challenge Marshall poses regards what gives empathy its positive moral valence, as someone could attend to another's experience with wrong intentions. Marshall mentions the example of a mind-simulating sadist. He suggests that I might be able to address this concern by adding a motivational component to my notion of attention. However, I do not propose a revised understanding of attention– but instead propose understanding empathy explicitly as a virtue.

In Chapter 5, I argued that empathy is a characteristic that contributes to a relational aspect of the Good Life - living well *together*. As we do not live in this world alone, empathy helps us to navigate our intersubjective lives by appropriately attending to other's experiences. I make use of the *virtue as a skill* model by Matt Stichter (2007), who conceptualises virtues as developed like a skill to live in accordance with a certain *moral goal*. This notion of having a *commitment* [44] to a moral goal aligns with the need for a *motivation* component in empathy as proposed by Marshall. Commitment to empathy, and being an empathetic person, which in practice means attending to another subject with the *readiness* to empathise. This readiness starts with the acknowledgement of and respect for another subject as a subject, rather than an object, and to recognise the relationship between your

[44] For a person to hold this commitment, it does not have to explicitly thought or expressed at any point.

experience and theirs: partly overlapping, partly diverging. This then, involves appropriately attending to experiential differences and similarities between the self and other, balancing between proximism and distantism. Here again, I stay open to a diversity of ways to approach this in practice, while being specific (and non-neutral) about its aim.

So, to respond to the particular question of whether I would consider a sadist to be empathetic: I wouldn't – as the person as sketched in this scenario is not committed to respecting another's subjectivity and with it, the relational aspect of the Good Life (this is similar to the example of manipulation discussed in Chapter 5). So, a sadist lacks the commitment to the moral goal of empathy – navigating experiential differences and similarities in order to *live well together*. This may indeed, as Marshall suggested, be associated with Kant's notion of "respecting humanity as an end", or other notions like human dignity, human or animal rights, compassion and care, notions of a "soul," etc. The idea that there is some fundamental intrinsically valuable thing in subjecthood that ought to be respected transcends philosophical traditions.

Marshall notes that the extreme example of the sadist can help us better understand empathy in ordinary well-intended people, with which I agree. Actually, a lack of readiness to approach other subjects empathetically is something most (if not all) of us experience time to time. This can help us think about how, for example, some social media platforms promote us to let go, if only for a moment, of our commitment to empathy by reducing other persons to profiles. And constructively, how to design or implement such platforms instead in a way that promotes empathic attendance to each other online.

Lastly, I want to address Marshall's question whether empathy could or should promote prosocial behaviour. In principle, if someone is in distress and you could do something to alleviate it, empathising with the person could provide motivation to do so (I will come back to this later in section 8.2.1). However, I wouldn't consider this a direct or one-dimensional relationship. To help someone, as discussed in Chapter 5, other virtues may be needed too. For example, if someone is drowning, but I lack the courage to jump into the water myself to save them – the absence of my helping behaviour is a lack of courage rather than a lack of empathy. Or maybe I am courageous enough, but if I would miss the swimming skills to save them, and I would only make things worse by jumping in myself (then there are two people drowning). Also, if I would jump in to come out a hero and only have self-serving pursuits as motivation, it's nice that I saved a person, and I may be courageous, but this wouldn't be reason to call me empathetic.

8.1.5. Concluding Thoughts on Marshall's comments

As Marshall wrote, "discussions of empathy are ripe for well-meaning academics doing real harm". I was pleased to read that he found my argument to start by actively avoiding neurotypical gatekeeping of empathy convincing, and that he supports the moral valence of empathy as a concept.

Despite his support for parts of my account, Marshall also raised four interesting challenges. The first three allowed me to clarify some potential misunderstandings surrounding the account I developed in Chapter 4. Namely, that 1) I indeed propose that academics who aim to conduct descriptive and neutral research should aim to avoid moral concepts such as empathy to avoid confusion and undesirable societal implications, that 2) my account was not meant to be entirely inclusive and neutral but a normative ideal that is open to diversity, and 3) why I am committed to the importance of attending to experiential differences – not only similarities - as an essential part of empathy. The fourth challenge addressed a topic the original paper did not really engage with, but that I have worked on in later research (Chapter 5 of this thesis) where I have further fleshed out this account of empathy understood as a virtue and its associated moral commitment to *living well together*.

I would like to close off with a few words on what Marshall highlights at the end of his reply: the importance of humility with regards to empathy. I was pleased to read that this theme stuck out from the paper, as I do believe this to be very important. This is not only the case for empathy in general, but particularly we need to be wary of this as researchers towards those who our research concerns. This means we need empathy to attend to the experiences of research subjects if we conduct empirical research or make empirical claims, and we should be careful with generalisations and projections of our own experiences – acknowledging that other's experiences can be vastly different from what we can imagine.

8.2. Additional thoughts on what empathy is

In this section I will address two themes in questions I have received when presenting or talking about my research with colleagues, at conferences, in classes, when teaching, in casual conversations etc. Addressing these will allow me to provide some additional thoughts and reflections on what I take empathy to be. First, I will explore the relationship between empathy, sympathy, and compassion. Then I will introduce a perpendicular axis to the proximism-distantism axis, namely: superficial-deep.

8.2.1. The relationship between empathy, sympathy, and compassion

One of the most frequently asked questions has been to comment on the distinction between empathy, sympathy, and compassion. The challenge with this question is that I think these two concepts call for two complete dissertations as well. As definitions of empathy widely diverge, so are there varying accounts of how the concepts empathy, sympathy and compassion relate to each other (Cuff, Brown et al. 2016). For example, the investigation of Cuff et al. found completely opposing views on whether sympathy and empathy are two terms that refer to the same thing or to significantly different phenomena (with additional disagreement about the relevant phenomena in question). An example of the latter is to distinguish empathy and sympathy as "feeling with another" and "feeling for another", respectively[45] (Hein and Singer 2008). In their account, sympathy and compassion were grouped together as referring to the same phenomenon. To do justice to this complex web of different views and meanings, these distinctions deserve a thorough investigation, not only in terms of mapping out how they are understood (and their overlapping etymological roots and intertwining history…(Zahavi 2010)), but also how these concepts and their relation *ought* to be understood in a useful manner. With useful I mean that the concepts effectively support us in making sense of the world – for example by not leaving us with significant conceptual gaps or overlaps, and in case of moral concepts that they are fair (as was a big concern with regards to empathy in this dissertation). I cannot provide such an analysis in full here, but I will present some rudimentary ideas for how I would approach these questions. This means that I will not attempt to provide definitions of sympathy or compassion but sketch out how I think these concepts may be distinguished from empathy, as a starting point. These are not fully formed arguments, but rather exploratory intuitions.

Let's start with sympathy. As with empathy, I find it important to consider how the term is used colloquially, and the power that is associated with the term. During the research of this dissertation, I haven't experienced a strong connotation between sympathy and judgements on character the same way I have with empathy[46]. My intuition is that it would make less sense to conceptualise sympathy as a virtue or another kind of normative concept per se, but instead as an experience, state, or

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[45] This distinction cannot easily be aligned with my account of empathy, as I do not understand empathy as "feeling with someone".

[46] Colloquially speaking; in philosophy literature this connection is definitely argued for (and against), just as with empathy. I do want to note here that translations from other languages to English complicate distinguishing the terms empathy and sympathy and the phenomena they refer to.

attitude, that can *follow* from attendance to another's experience. This attendance can be an appropriate one, empathetic, or not. With regards to the relation between sympathy and morality, perhaps the empathy (or lack thereof) with which one attends to another's experience impacts whether the sympathy that follows from it is appropriate and "good" or not. In a popular and (societally) influential video by Brené Brown, she presents sympathy in a negative light, in contrast to empathy (Brown, Davis et al. 2013). In her account, with sympathy, one places oneself *above* the other, while with empathy one places oneself *next to* the other. In my interpretation, a situation where sympathy is associated with a sense of superiority or reducing the other to their suffering (as argued by Brown), results from a distantistic tendency. I wonder whether it is useful to consider sympathy from an *empathetic* person to be problematic too. My intuition would be that this would leave sympathy to be a rather neutral concept, to which value (positive or negative) can be attached *via* empathy or lack thereof. As I said before, I will not attempt to define sympathy, but instead sketch a potential relationship between sympathy and empathy, which could be a starting point for a further investigation. So, to conclude, I would suggest that sympathy is an experience that can *result from* empathy, *but also from* distantism or proximism.

Next is compassion. From the three concepts (empathy, sympathy, and compassion), compassion seems to have the least controversial positive connotation, again, colloquially speaking. It also seems to be a good candidate to be considered a virtue, just as empathy. Where I would start distinguishing compassion and empathy, is their associations with other concepts Compassion may be, more than empathy, associated with (value) concepts such as love, kindness, care, and altruism. In my account of empathy, I have tried to partially disconnect empathy from these terms, particularly from prosocial or altruistic behaviour. Instead, I have narrowed down the focus, aim, or moral goal of empathy to respecting other's subjectivity by attending to both experiential differences and similarities. This seems to be more in line with common intuitions about empathy and the pitfalls of its corresponding vices, while avoiding concerns I had with empathy measurements and neurotypical gatekeeping. This is not to dismiss the value of concepts such as care, altruism, etc. In Chapter 5, I expressed at various points that empathy is not the only important virtue, rather one of the virtues. Compassion may be considered a virtue that complements empathy and other virtues. It could be one that is more linked to kindness, care, and altruism as I have detached empathy from these concepts, at least in the formal theoretical conceptualisation. The notion of "self-compassion" is an interesting way to sketch the conceptual difference between empathy and compassion I suggest. In my account,

"self-empathy" is a nonsensical notion, as empathy is grounded upon the idea that between two subjects, experiences partly overlap and partly diverge. Empathising with oneself would be, according to my account, void or contradictory. In contrast, self-compassion refers to something along the lines of being kind, caring, and soft towards oneself, perhaps balancing between harsh discipline on the one hand, and indulgence or self-victimisation on the other. This paints a picture of what it could mean to understand (self-)compassion as a virtue, with a commitment to a moral goal along the lines of kindness. To provide another short example to sketch the difference between empathy and compassion, let's consider a scenario. A friend tells you they feel bad about something that happened and you sincerely do not understand why this event caused a negative emotion. To better understand the friend, you could ask for clarification: "why did this make you feel bad?" – helping you to get a better grasp of your experiential similarities and differences. Alternatively, you could say "I'm sorry you feel bad, is there something I can do to make you feel better?" – which would not help you better understand their experience, but instead express and provide care and kindness. Most likely you could do both, but which one we think of first may depend on our value priorities, and which virtue - empathy or compassion - we have mastered more (and of course on the situation, our relationship with the friend, cultural norms, and other contextual factors). So, similar to what I did with sympathy, I have sketched a possible distinction and relationship between empathy and compassion. Namely, both concepts may be considered virtues (both relational or intersubjective[47]), but with different and complementary moral goals and contributions to the Good Life.

8.2.2. Deep and superficial empathy: a perpendicular axis

Another recurring theme in questions I've received in response to my account of empathy has to do with the demandingness of being empathetic in daily life. For example, during a trip to the grocery store we encounter so many different subjects, it would be impossible to get to know the experience of all of them and understand how they relate to our own experiential lives in terms of similarities and differences. To this I say that I do not consider this to be necessary at all in order to be an empathetic person. To clarify this, I would like to introduce an axis perpendicular to the proximism-distantism axis: depth-superficiality of the relationship. This addition does

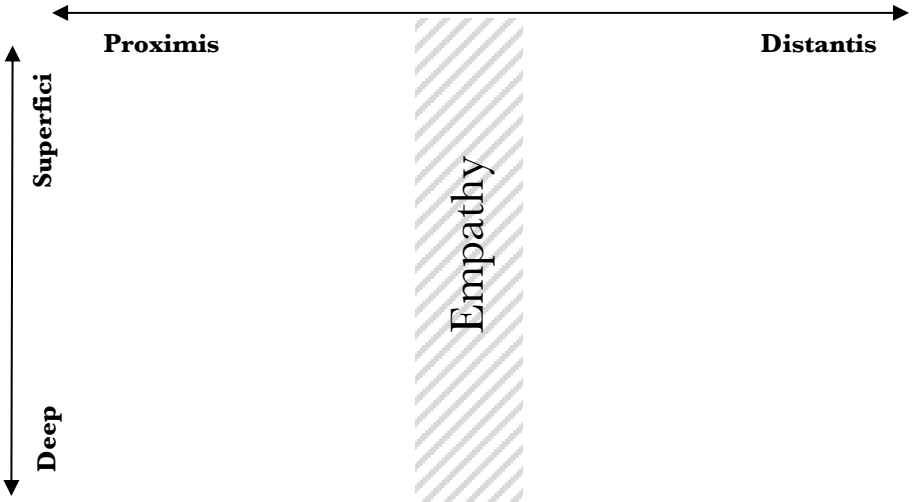
[47] While compassion also has a clearer individual or personal component in contributing to the Good Life, namely self-compassion. Potentially these can be considered two different but deeply related virtues.

not change the definition of empathy developed and argued for in this dissertation, namely as the balance between proximism and distantism. Instead, it introduces a spectrum of depth along which empathy can exist. Empathy as a virtue helps us appropriately navigate our intersubjective lives, and these intersubjective lives involve a variety of relationships with other subjects that are of different natures and levels of depth. Being an empathetic person involves approaching this range of relationships empathetically, whether superficial or deep.

Let's return to the example of a trip to the grocery store. We walk past various people we don't know, constituting an only very superficial relationship with them. Still, they are subjects with whom we share the environment we're in, the store in this case. We typically don't regard them as objects, like the shelving units with products. Furthermore, we can recognise that other people are on their own journey, with their own grocery lists, intentions, and experiences of being in the store (perhaps a highly over-stimulating and distressing environment to some, for example because of neurodivergence). As surface level as it may be, we can still find the balance between proximism and distantism in these intersubjective experiences. When we run into a dear friend and start a conversation with them, we are involved in a relationship with more depth and complexity - we know more of their experience and can attend to it more deeply. However, this depth does not automatically indicate that this attendance is also more empathetic – here too a balance between proximism and distantism needs to be found. So, across a spectrum of deep and superficial relationships with subjects we share this world with, we can attend to their experiences proximistically, distantistically, or empathetically. This aligns with the narrative approach to virtue as discussed in Chapter 5. To recall, someone's character can be more or less empathetic given their own life story, situated in a meta-narrative. This story overlaps with the stories of others at various points, in a variety of ways, with varying degrees of depth – which is exactly the intersubjective or relational component of the life that is lived. Empathy helps us navigate this *well*, this range of relationality.

I suggest that empathy is not normative towards how deep or superficial relationships *ought to* be, but on how, given the context and nature of the relationships, experiential differences and similarities are attended to. I recognise that this may seem counterintuitive; shouldn't living empathetically involve deep relationships with others? There are two reasons I steer away from this intuition. The first is that this connection would compromise the clarity of the concept and its application as a normative conceptual tool. There are so many aspects involved in the relationships one develops and the opportunities one has to develop them, that this would clutter

and confuse our understanding of empathy itself[48]. Additionally, appropriately navigating our intersubjective lives has to include the morality of superficial relationships and encounters too, which this interpretation of depth as a perpendicular axis does.



8.3. Ideas for future research

In this final section of the Discussion, I will put out some ideas for future research that could build on the findings and arguments in this dissertation.

8.3.1. Education

The first area of research that I want to mention relates to another recurring theme in questions I received on my account of empathy. This is the role of empathy in education, or how empathy can be taught. Applying the virtue approach of empathy discussed in Chapter 5, this can be broken down into three parts: 1. encouraging the commitment to be empathetic, learning about the value of empathy in living a Good Life, and practicing the readiness to be empathetic in every intersubjective encounter (however superficial or deep), 2. helping with acquiring useful skills to support

[48] I would also be particularly concerned that conceptually connecting empathy to the depth or number of relationships one has puts the concept back at the risk of inviting neurotypical gatekeeping, when overlooking how narrow social norms and practices, societal pressures, exclusion, stigmatisation and discrimination can form barriers to forming deep relationships that are not to be confused for a lack of empathy.

empathy, including a wide range of (technology mediated) communication skills, and 3. creating a safe and constructive environment in which to practice, make mistakes, learn, cultivate, and develop empathy over time. It would be incredibly valuable to explore how these initiatives can be and are already put into practice in specific education settings, combining this theoretical approach with insights from educational science and practice, pedagogy and developmental psychology. The insights from Chapter 6 on the both supportive and obstructive potentials of communication technologies on empathy development could be used to inform some current educational challenges, such as the use of technologies in classrooms and the development of digital literacy curricula. Particularly, Furthermore, as came up in Chapter 7 in the analysis of experiences with AAC technologies, it could be worthwhile to critically explore the relationship between "special" and "regular" education with regards to empathy, the double empathy problem, societal inclusion of people with disabilities, and the potential of education in realising a more inclusive and empathetic society.

8.3.2. Storytelling

Another line of thinking that I believe is worth to pursue, potentially in relation to empathy education and development, is storytelling to foster empathy and perhaps the role technologies can play in this. Engaging with stories can help us practice empathy. This has been extensively explored, but the theoretical account of empathy and how it can be technologically mediated as presented in this dissertation may provide a new and interesting lens through which the relationship between narrative art and empathy can be approached. For example, using the narrative approach to empathy as a virtue, it is possible to analyse characters in stories in light of empathy. This way, we can view characters as role models (or the opposite) in empathy, and they can be inspirational (or cautionary). Similarly, characters can showcase significant development of empathy over time – overcoming certain tendencies towards proximism or distantism towards another character throughout the story. This may be particularly effective by posing relatability from the start, making *use* of similarity bias at the start through relatability, to ease development *alongside* the character.

On a different note, stories can represent experiences less familiar to us, perspectives we would otherwise maybe not encounter in our daily lives. Even when characters are fictional, and so are their "experiences", we can practice empathy with them, like a skill. Similarity bias is a particular psychological challenge to empathy

discussed at various points throughout this dissertation. Individuals from majority groups typically have fewer encounters with, and as such fewer opportunities to practice empathy for, minority groups (for example neurotypicals towards autistic people, as argued by Chown (2014) with regards to the double empathy problem)[49]. As such, stories can provide the opportunity to challenge one's own biases or blind spots and learn about different experiences. However, stories may just as well invite proximism or distantism, and it would be useful to explore the factors that may influence this (for example the way a story is told or framed, the medium that is used, the intention, context, and experiences of the person engaging with the story, etc.). Particularly, it would be interesting to explore different ways in which technologies could play a role in this. As mentioned in the Introduction and Chapter 6, communication technologies can provide ways for the experiences of marginalised communities to be voiced, shared, and heard. With regards to fiction, technologies can play a role in how stories can be told, consider, for example, animation.

8.3.3. Applying the Technologically Mediated Empathy framework

Finally, one of the main practical contributions of this dissertation is the theoretical framework developed in Chapter 6 that can be used to evaluate, design, and improve communication technologies to support users with empathy, and not make the empathic navigation of our intersubjective lives even more challenging. The framework has a broad range of potential applications. The analysis in Chapter 7 is an example of a broad conceptual and theoretical use of it. It would be valuable to apply the framework to different technologies and in different contexts, for example the actual design practice of a very specific innovation. Furthermore, it would be valuable to empirically investigate the different human-technology and society-technology interactions described in Chapter 6 in application to a specific communication technology.

With these perspectives on the future in mind, I will now return to the research questions formulated in the Introduction and summarise the main findings of this dissertation in the next and final chapter: Conclusion.

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[49] This would be an argument to support representation of minorities and marginalised groups in media, in addition to the value of recognition for people from underrepresented communities themselves. This empathy angle highlights the significance of diverse storytelling for people from dominant or majority groups as well.

9. Conclusion

The title of this dissertation reads *Empathy 2.0: What it means to be empathetic in a digital and diverse world.* The formulation of the subtitle was crafted carefully to include three important conclusions that can be drawn from this work. To start, I already hinted at the notion that empathy is a virtue:

> it is something one can *be*.

I also embedded the idea that it should be understood in context:

> it is something one can be in a *world*.

Finally, I note that the context we currently live in, and we want to live in *well*, asks us to deal with digital media and technologically mediated ways of being social, as well as to deal with a wide *diversity* in perspectives and experiences in the subjects we share this world with – one aspect of this being neurodiversity. In other words:

> it is something one can be in a world that is *digital and diverse*.

But what does it mean to be empathetic? To summarise what I argue in my dissertation very concisely: it means to have a commitment to approach other subjects as subjects and, accordingly, appropriately attend to both experiential differences and similarities between the self and other. These differences may include very fundamental things. With this commitment, one can develop the virtue of empathy over time, like a skill, by recognising tendencies to what I call the vices of proximism and distantism and putting the readiness to empathise into practice. On various levels, communication technologies can work along or against us in this process, which is why I plea for both empathic technology design as well as empathic technology use.

In this concluding section of the dissertation, I will answer the research question and subquestions that I have formulated in the introduction, based on the research in the chapters in between. To recall, the main question was: How should we understand empathy, as a normative concept, in a way that accounts for technologically mediated communication *and* is inclusive to autistic empathic experiences? I will first address the subquestions, as together, they contribute to the main research question.

SQ1 How is empathy currently understood in autism research? How is it defined and measured?

To put it mildly, there is no consensus on what empathy exactly is. Starting off with this project, this quickly became clear with the first research articles I encountered. The autism context is of particular relevance as autism is often linked to empathy in research, and the confusion about what empathy is particularly impacts autistic people. In the multidisciplinary systematic review I then performed, documented in Chapter 2, I found no less than 31 different definitions of empathy used in autism research. These definitions differ from each other along 12 dimensions, related to five themes: the affective or cognitive nature of empathy, how to access another's experience, the function of empathy, self-other distinction, and empathy as self- or other-oriented. On the basis of these dimensions, I developed a reflective framework, a list of 12 questions, that can be used to more clearly communicate what one understands empathy to be and to interpret the work of others correctly, uncovering how they exactly use the term.

There are various categories of methods used to measure empathy (52 were found in the systematic review), the most popular being self-report questionnaires. Notably, these methods do not always align with how empathy is conceptualised in the same context.

Notably, it is also debated whether empathy is a moral concept or not, as discussed in Chapter 3. Crucially, what one understands empathy to be drastically shapes any arguments that can be made against or in favour of a place for empathy in morality, and if there is, what kind of place this may be. At the same time, empathy is colloquially associated with goodness, and accordingly, a lack of empathy is perceived negatively.

SQ2 What problems are occurring with existing dominant accounts of empathy?

The findings of the systematic review led to two main concerns: conceptual confusion and neurotypical gatekeeping (Chapter 3). The extreme ambiguity on what the term empathy refers to confuses research done on the concept. The concept plays a vital role in, and is studied from the perspective of, various disciplines. But even within disciplines, there is vast disagreement on what empathy is, both descriptively and normatively. Empathy research is prone to misunderstandings and misinterpretation, holding back academic progress. In the meantime, there are critical timely questions and societal challenges related to empathy – namely, regarding (new) communication

technologies and their impact on social practices. The problem is that it is unclear how to approach these challenges amidst the multi-layered conceptual ambiguity of what empathy means.

The second problem, introduced in Chapter 3, concerns what I call the *neurotypical gatekeeping* of empathy. Through various mechanisms, the way empathy is conceptualised and operationalised in research pre-emptively excludes the possibility of autistic empathy, creating circular reasoning in the often-voiced claim that autistic people lack empathy. Methods to measure empathy often reduce the concept to narrow operationalisations of how empathy ought to be experienced and expressed, which closely relates to adherence to social norms and expectations and falling inside what is considered "normal" regarding how stimuli, information, and emotions are experienced and processed. As such, popular empathy measures such as the EQ questionnaire are at risk of measuring neurotypicality rather than empathy. As such, we lack conceptual resources to make sense of autistic empathetic experiences, something I argue to be a matter of *epistemic injustice*. Considering the moral connotation empathy holds in society, even if the research used the term differently, this supports a stigmatising narrative of autism that does not align with actual lived experience.

SQ3 Should empathy be considered a normative concept at all, and if so, in what way?

In Chapter 3, I argued that, because of the impact and power that comes with using the term, we should lean into the normative connotation it has in society. I consider this a more realistic and reasonable alternative than projects that aim to remove the normative connotation of the concept altogether and defend a morally neutral and descriptive understanding of empathy. Both approaches attempt to resolve the misalignment between how the term is sometimes used in empirical research and how it is understood by the rest of society and other academics. However, I argue that we need to adequately and timely respond to the injustice currently experienced by autistic people. So, I argue, in line with common intuitions about the concept inside and outside academia, that we do need to understand it as a normative concept but make its exact conceptualisation a fair one that is actually grounded in morality.

In chapters 4 and 5, I developed such an account. I proposed that empathy should be understood as a virtue. In fact, we often already use it that way: we ascribe it to someone's character in a positive manner. Empathy contributes to the Good Life by helping us navigate our intersubjective lives and overcoming the pitfalls of the vices

proximism and distantism that can hold us back from *living well together*. According to the virtue ethical approach that I use, a virtue is developed like a skill with a commitment to put a certain moral goal into practice. In the case of empathy, this means a commitment to approaching other subjects as subjects whose experiences partly overlap and partly differ from one's own. In practice, this means appropriately attending to both experiential differences and similarities between the self and other – balancing between proximism and distantism, referring to overlooking differences or similarities, respectively. This approach to empathy combines two common intuitions about the concept: identification/simulation on the one hand, and perspective taking and self/other differentiation on the other – yet recognising that both are problematic when taken to an extreme.

In its function as a moral concept, empathy (and virtues in general) should be understood in the context of one's life narrative. Being empathetic not a one-time thing, nor necessarily consistent over either time or across situations, but a characteristic that can be present to a more or lesser extent in a narrative. Also, this narrative is to be understood in the context of what I refer to as a meta-narrative: the context in which a life is lived – the time and place, society, with certain practices, traditions, which create particular challenges to living a good life. Currently, these challenges include digital communication media and a social world that is, on the one hand interconnected, and on the other fragmented. This emphasises the current importance of empathy as a virtue that is needed for a Good Life in this day and age.

SQ4 What role(s) can communication technologies play in empathy? How to make sense of technologically mediated empathy?

Communication technologies can impact empathy on a personal (narrative) and societal (meta-narrative) level, as analysed in Chapter 6. On the personal level, they can emphasise or diminish the status of others as subjects, influencing the *readiness* to empathise, even when commitment is there. They can influence empathy *development*, helping us through new ways of communication and feedback, but also stand in the way of it. Also, they change which *skills* are needed to successfully empathise in practice, given the value of communication skills to support empathy. On the societal level, communication technologies change the social context we are living in (and trying to live *well* in) as social beings. They can change norms and expectations on communication. They change who gets to share experience and how, change whose stories we have access to, and, as such, impact power dynamics (for better and worse).

And lastly, they can create an interconnectivity that posits particular challenges to living well, given the similarity bias often present in human psychology.

To summarise, communication technologies can mediate empathy in the following aspects: readiness, development, skills, social norms, equality, equity, and interconnectivity. Examples of each form of mediation are provided in Chapter 6, whereas Chapter 7 discusses how these dimensions bear on Alternative and Augmentative Communication (AAC) technologies in particular.

SQ5 How can empathy be used as a normative conceptual tool applied to communication technologies (assessment, evaluation, design, etc.)?

The analysis of how communication technologies can mediate empathy, as performed in Chapters 6 and 7, can function as a theoretical framework for moral reflection, evaluation, and guidance of particular communication technologies with regard to empathy. At the end of Chapter 6, I formulated seven questions representing the seven dimensions of technology-mediated empathy that were explored. These questions can be used for evaluation and reflection or constructive design of communication technologies for empathy. Chapter 7 provides a case study of how this can be done.

I argue that empathy is to be understood and used as a moral concept, particularly a virtue – it something one can *be,* and being it is *good*. But, how to apply the concept to actual people? In other words, how to determine how empathetic someone is? In the first chapters of this dissertation, I have criticised many popular approaches to empathy for being exclusive and not actually related to morality. The account of empathy developed in this dissertation adopts a virtue approach to empathy, which has consequences for how to ascribe the concept to people. I argue that to evaluate how empathetic someone is, their character needs to be understood in a narrative, which then needs to be understood in the context of the meta-narrative the life is lived in. This is incredibly demanding and poses challenges to empirical investigation of empathy, but I argue it is fair in consideration of the power of ascribing (or not) moral concepts to individual people. However, the concept of empathy can play a role in empirical research in other ways (as suggested in the Discussion). Empathy can be used as a normative concept to evaluate the desirability of the potential impact of various things (technologies, policies, stories, developments, etc.), but it needs to be acknowledged that it is complex, multi-layered, contextualised, and sensitive – and it is not to be reduced to a numerical score.

So then, finally, with all this in mind, we can attend to the main research question:

RQ How should we understand empathy, as a normative concept, in a way that accounts for technologically mediated communication *and* in a way that is inclusive to autistic empathic experiences?

In this dissertation, I have argued to understand empathy as a *virtue* that helps us navigate *intersubjectivity* in order to *live well together*. It is the balance between *proximism* and *distantism*, referring to unduly overlooking experiential differences and similarities between the self and other, respectively. To what extent someone is empathetic or not is to be understood in the context of one's life *narrative*, that is lived in a *meta-narrative* – the context in which one is pursuing a Good Life that poses particular challenges to it. *Communication technologies* provide us with various challenges and opportunities to navigate intersubjectivity appropriately. I argue that we need to understand empathy as an explicitly moral concept, leaning into how the word is used colloquially, as the existing ambiguity on the normative status of empathy inside academia is causing confusion and contributing to the stigmatisation of autism – through *neurotypical gatekeeping* of the concept of empathy.

Next to answering the specific research questions I set out to address, this dissertation provides some additional theoretical, methodological, and practical contributions that I will briefly sum up here.

- In Chapter 3, I introduced the concept neurotypical gatekeeping as a way to conceptualise the epistemic injustice with regards to neurodiversity and empathy. This term may also be used beyond this context to give a name to injustices that exclude neurodivergent people and their experiences and perspectives.
- In Chapter 5, I drew on various virtue theoretical approaches to develop a comprehensible theoretical framework to explicate what makes a virtue a virtue and how to use them as moral concepts. I used this framework to develop my account of empathy as a virtue, and it may be used to explore other virtues as well. This may be considered a methodological contribution to moral theory in general.
- Similarly, the methodological approach to technological mediation developed and used in Chapter 6 may also be useful beyond the scope of this dissertation. There, I brought together a postphenomenological perspective on human-technology relationships and critical theories such as the social model of disability, to create a multilayered lens through which to explore technological mediation.

- Lastly, next to contributing to the main research questions as a case study, Chapter 7 offers some specific recommendations to empathic AAC design, use, and implementation.

The research in this dissertation highlights a fundamental and humbling notion: my experience of the world is not the same as yours, but it is also not completely disconnected from it. Both overlooking and exaggerating such differences can be problematic – in our daily lives, but also in our attempts to understand the world and our experiences of it a bit better through academic research.

When we design methods to measure certain psychological constructs,
we should not mistake expressions for experiences, generalising our interpretation of the relationship between them.

When we theorise about moral concepts,
we need to be actively critical against implicitly reinforcing historical and cultural biases against certain ways of being.

When we consider the desirability of the impact of a technological development,
we need to take into account the variety of how this impact can be experienced.

Across differences, along similarities, we share a world with each other. I hope that this work on *Empathy 2.0: What it means to be empathetic in a digital and diverse world* can help us understand and navigate that a bit better.

Summary

In this dissertation, I develop a novel account of empathy as a normative concept to better serve the 21st century and its social and sociotechnical challenges.

Communication technologies (CTs) have a significant impact on our social lives and our ways of relating to one another. This brings about new ethical concerns as well as opportunities. Ideally, technologies make our lives, our society, and our world better. However, there are concerns, discussed both academically and colloquially, that the increasing role of CTs in our social lives estranges rather than connects us. This dissertation focuses on a central concept within this discussion on CT's impact on sociality and relationality: empathy.

Defining empathy is tricky. The meaning of the concept is far from agreed upon, and this, too, comes with critical ethical concerns. Nevertheless, most people probably have some sense of what the term empathy refers to. Notably, empathy is typically used normatively. To be called empathetic is considered a compliment and to be named unempathetic an insult. If a certain technology were deemed to undermine or diminish empathy, this would typically be regarded as undesirable. However, various academic definitions of empathy that are used for research are not associated with morality at all. This conceptual unclarity confuses debates and makes it difficult to meaningfully engage with the concept together and across disciplines.

The ambiguity and disagreement about what empathy is make it unclear whether and how we can actually use this concept for ethical reflection, guidance, and argumentation. Nevertheless, the concept is being used academically and colloquially to make sense of various social and technical phenomena in a normative manner – to express concern, appreciation, value, risks, etc. This is not without problems. The aim of this dissertation is to expose some of these problems and provide a solution: *an account of empathy as a normative concept to better serve the 21st century and its social and sociotechnical challenges*.

In addition to uncertainty in the ethics of modern CTs, there is another ethical challenge concerning the confusion on what the term empathy refers to. As explored in the first chapters of this dissertation, there is a strong link between how empathy is conceptualised and operationalised in research and the academic and societal understanding of autistic empathy (or, better to say, the presumed lack thereof). Autism is often associated with diminished or even lack of empathy, which is a widely

held view both inside and outside academia. This, combined with the widely held normative connotation of the term, supports a negative outlook on autism and autistic people. In recent years, this narrative has been increasingly contested by autistic people sharing their experiences of empathy. This provides another motivation to reassess how to best conceptualise empathy, to not only better suit the current technosocial context but also to cast off the discriminatory tendencies in how the concept is understood and used.

The main body of this dissertation is split into three parts, each consisting of two chapters. Part I, "Problems in defining empathy", starts with an interdisciplinary systematic review of empathy definitions and methodological operationalisations as used in research on autism and empathy (Chapter 2). I found no less than 31 different conceptualisations of empathy, differing across 12 dimensions. In Chapter 3, I expand on how the manner in which empathy is conceptualised and operationalised in research pre-emptively excludes the possibility of autistic empathy, creating circular reasoning in the often-voiced claim that autistic people lack empathy. Because of this, we lack conceptual resources to make sense of autistic empathetic experiences, something I argue to be a matter of epistemic injustice. I introduce the notion of *neurotypical gatekeeping* of empathy to refer to this phenomenon. I continue by arguing for the need to revise the concept of empathy into an explicitly normative one. I argue that, because of the impact and power that comes with using the term, we should lean into the normative connotation it has in society and making sure its exact conceptualisation is a fair one.

Part II, "A proposal for empathy", starts with a sketch of such a revised account of empathy in Chapter 4. I propose to understand empathy as *appropriately attending to both experiential differences and similarities between the self and other* – balancing between *proximism* and *distantism* – terms referring to problematic tendencies of overlooking differences or similarities, respectively. This approach to empathy combines two common intuitions about the concept: identification with the other on the one hand and differentiation from the other on the other – while recognising that both are problematic when taken to an extreme. In Chapter 5, I expand on this proposal and make use of virtue theory to build a more detailed, in-depth account of empathy 2.0. I draw on various virtue theoretical approaches to develop a framework to explicate what makes a virtue a virtue. I argue that empathy contributes to the Good Life by helping us navigate our intersubjective lives and overcoming the pitfalls of the vices proximism and distantism that can hold us back from living well together. In this account, to be empathetic means to have a commitment to approach other subjects as subjects with rich

experiential lives and, accordingly, to appropriately attend to both intersubjective experiential similarities and differences. With this commitment, one can develop the virtue of empathy over time, like a skill. On various levels, CTs can work alongside or against us in this process.

This brings us to Part III, "Empathy and Communication Technologies", which explores how my account of empathy can be applied to CTs. Chapter 6 dissects various ways in which CTs can mediate empathy. I bring together the conceptualisation of empathy developed in the previous chapters with mediation theory and critical theories, such as the social model of disability, to create a multilayered lens through which I explore the technological mediation of empathy. Building on this analysis, I developed a framework that can be used to *evaluate and design CTs for empathy*. Chapter 7 applies this framework to a specific subset of CTs: Alternative and Augmentative Communication (AAC) technologies. These are assistive technologies designed for people whose daily communication needs are not met by the use of speech – which can be because of a variety of reasons or causes, one of them being autism. I conducted interviews with users of AAC technologies to gain insight into their lived experience of using these technologies and their perspectives on their relationship with the device, empathy, and societal inclusion. In this chapter, various concepts, frameworks, and arguments developed throughout the previous chapters come together to demonstrate how they can be used in the ethics of technology, seeing *empathy 2.0* in action.

The research in this dissertation highlights a fundamental and humbling notion: my experience of the world is not the same as yours, but also not completely disconnected from it. Both overlooking and exaggerating such differences can be problematic – in our daily lives, but also in our attempts to understand and make sense of the world and our experiences of it through academic research. Across differences, along similarities, we share a world with each other. I hope that this work on *Empathy 2.0: What it means to be empathetic in a digital and diverse world* can help us understand and navigate that a bit better.

Samenvatting

In dit proefschrift ontwikkel ik een nieuwe beschrijving van empathie als een normatief concept dat de maatschappelijke en socio-technische uitdagingen van de 21e eeuw beter dient.

Communicatietechnologieën (CTs) hebben een significante impact op onze sociale levens en de manieren waarop we ons tot elkaar verhouden. Dit brengt zowel nieuwe ethische zorgen als kansen met zich mee. Idealiter maken technologieën onze levens, onze maatschappij, en onze wereld beter. Echter, zowel binnen als buiten de wetenschap worden er zorgen geuit over of de groeiende rol van CTs in onze sociale levens ons vervreemdt in plaats van verbindt. Dit proefschrift focust op een centraal concept binnen discussies rondom de impact van CTs op socialiteit en relationaliteit: empathie.

Het definiëren van empathie is niet gemakkelijk. Er is geen consensus over wat het concept betekent, en ook hieraan zijn ethische kwesties verbonden. Toch hebben de meeste mensen wel een idee waar de term aan refereert. Noemenswaardig is dat empathie meestal normatief gebruikt wordt. Empathisch genoemd worden wordt gezien als een compliment, terwijl onempathisch genoemd worden een belediging betreft. Als een bepaalde technologie empathie zou ondermijnen of verminderen, zou dit in principe gezien worden als onwenselijk. Echter, verschillende academische definities van empathie die toegepast worden in onderzoek zijn helemaal niet gerelateerd aan moraliteit. Deze conceptuele onduidelijkheid verwart discussies en maakt het moeilijk om samen zinvol met het concept bezig te zijn tussen verschillende wetenschappelijke disciplines.

De ambiguïteit en onenigheid over wat empathie is maakt het onduidelijk of en hoe we dit concept werkelijk kunnen gebruiken voor ethische reflectie, sturing, en argumentatie. Het concept wordt alleen toch al wel gebruikt om op een normatieve manier te praten over verschillende maatschappelijke en technologische fenomenen – om duiding te geven aan zorgen, waardering, waarde, risico's etc. Dit gebeurt niet zonder problemen. Het doel van dit proefschrift is om sommige van deze problemen aan het licht te brengen en een oplossing te bieden: een beschrijving van empathie als normatief concept dat de maatschappelijke en socio-technische uitdagingen van de 21e eeuw beter dient.

Naast onduidelijkheid in de ethiek van moderne CTs, gaat er nog een andere ethische uitdaging gepaard met de verwarring over wat empathie betekent. Zoals

onderzocht in de eerste hoofdstukken van dit proefschrift is er een sterke connectie tussen hoe empathie wordt geconceptualiseerd en geoperationaliseerd in onderzoek, en het (beperkte) academische en maatschappelijke begrip van autistische empathie. Autisme wordt vaak geassocieerd met vermindering of zelfs afwezigheid van empathie. Dit is een breed gedragen standpunt zowel binnen als buiten de wetenschap. Dit, gecombineerd met de sterke normatieve connotatie van de term empathie, ondersteunt een negatief perspectief op autisme en autistische mensen. In de afgelopen jaren werd dit narratief betwist door autistische mensen die hun ervaringen van empathie deelden. Dit zorgt voor nog een motivatie om onder de loep te nemen hoe empathie het beste geconceptualiseerd kan worden om niet alleen beter in de huidige socio-technische context te passen, maar ook de discriminerende neigingen van hoe het concept wordt begrepen en gebruikt af te werpen.

Het centrale deel van dit proefschrift bestaat uit drie delen die elk bestaan uit twee hoofdstukken. Deel I "Problemen in het definiëren van empathie" begint met een interdisciplinaire systematische review van empathie definities en methodologische operationalisaties zoals ze worden gebruikt in onderzoek naar autisme en empathie (hoofdstuk 2). Ik vond wel 31 verschillende conceptualisaties van empathie, die van elkaar verschillen langs 12 dimensies. In hoofdstuk 3 breid ik uit over hoe de manieren waarop empathie geconceptualiseerd en geoperationaliseerd wordt in onderzoek bij voorbaat de mogelijkheid van autistische empathie uitsluit. Dit creëert een cirkelredenering in de vaak geopperde stelling dat autistische mensen geen empathie hebben. Hierdoor ontbreken conceptuele middelen om autistische empathische ervaringen te benoemen en begrijpen, een geval van epistemische onrechtvaardigheid. Ik introduceer de notie *neurotypische gatekeeping* van empathie om naar dit fenomeen te verwijzen. Ik betoog dat het concept herbeschreven moet worden tot een expliciet normatief concept. Ik beargumenteer dat, omdat het gebruiken van de term gepaard gaat met impact en macht, we mee moeten gaan in de normatieve connotatie die empathie heeft in de maatschappij en we ervoor moeten zorgen dat de exacte conceptualisatie ervan dus een eerlijke is.

Deel II "Een voorstel voor empathie" begint met een schets van zo'n herziene beschrijving van empathie in hoofdstuk 4. Ik stel voor empathie te begrijpen als *gepast omgaan met zowel experientiële verschillen als overeenkomsten tussen zelf en ander* – een balans vinden tussen proximisme en distantisme – termen die verwijzen naar de problematische neigingen om, respectievelijk, verschillen of overeenkomsten over het hoofd te zien. Deze benadering van empathie combineert twee gebruikelijke intuïties over het concept: aan de ene kant identificatie, en aan de andere differentiatie–

erkennend dat beide in extreme vorm problematisch zijn. In hoofdstuk 5 breid ik uit op dit voorstel en gebruik ik deugdtheorie om een meer gedetailleerde en diepgaande beschrijving van empathie 2.0 te ontwikkelen. Ik put uit verschillende deugd benaderingen om een theoretisch kader te vormen waarmee begrepen kan worden wat een deugd een deugd maakt. Ik stel dat empathie bijdraagt aan het Goede Leven door ons te helpen onze intersubjectieve levens te navigeren en de valkuilen van proximisme en distantisme te boven te komen, die ons ervan weerhouden goed samen te leven. In deze benadering betekent empathisch zijn toegewijd zijn aan het benaderen van andere subjecten als subjecten met rijke experientiële levens, en hiertoe gepast om te gaan met zowel experientiële verschillen als overeenkomsten. Met deze toewijding en inzet kan men de deugd empathie gedurende de tijd ontwikkelen, zoals een vaardigheid. Op verschillende niveaus kunnen CTs ons ondersteunen of in de weg zitten in dit proces.

Dit brengt ons tot deel III "Empathie en communicatietechnologieën", waarin ik onderzoek hoe mijn definitie van empathie toegepast kan worden op CTs. Hoofdstuk 6 zet verschillende manieren waarin empathie gemedieerd kan worden door CTs uiteen. Ik breng de conceptualisatie van empathie zoals ontwikkeld in de voorgaande hoofdstukken samen met *mediation theory* en kritische theorieën, zoals het sociale model van functiebeperkingen, bij elkaar om technologisch gemedieerde empathie door een gelaagde lens te bestuderen. Voortbouwend op deze analyse ontwikkel ik een theoretisch kader dat gebruikt kan worden om *CTs te ontwerpen en evalueren aan de hand van empathie*. Hoofdstuk 7 past dit kader toe op een specifieke subgroep van CTs: Ondersteunde Communicatie (OC) technologieën. Dit zijn technologische hulpmiddelen voor mensen wiens dagelijkse communicatiebehoeften niet worden vervuld door spraak. Dit kan verschillende redenen of oorzaken hebben, waaronder autisme. Ik heb interviews uitgevoerd met gebruikers van OC-technologieën om inzicht te krijgen in hun beleefde ervaring van het gebruik van deze technologieën en hun perspectieven op hun relatie met de hulpmiddelen, empathie, en maatschappelijke inclusie. In dit hoofdstuk komen verschillende concepten, theoretische kaders en argumenten die zijn ontwikkeld in de voorgaande hoofdstukken bij elkaar om te demonstreren hoe ze gebruikt kunnen worden in de ethiek van technologie en ziet men empathie 2.0 in actie.

Het onderzoek in dit proefschrift benadrukt een fundamenteel en nederig begrip: mijn ervaring van de wereld is niet dezelfde als die van jou, maar ook niet volledig gescheiden ervan. Deze verschillen over het hoofd zien dan wel overdrijven is problematisch – in ons dagelijks leven, maar ook in onze pogingen de wereld en onze

ervaringen ervan beter te begrijpen middels wetenschappelijk onderzoek. Over verschillen, langs gelijkenissen, we delen een wereld met elkaar. Ik hoop dat dit werk over *Empathie 2.0: wat het betekent om empathisch te zijn in een digitale en diverse wereld* ons kan helpen dit beter in te zien en te navigeren.

About the author

Caroline Bollen grew up in the Eindhoven area before moving to Nijmegen to study at Radboud University in 2014. Intrinsically curious about life, consciousness, and other fundamental matters, she curated her own study program combining a Propedeuse in Physics and Astronomy, a BSc in Medical Biology and a minor in Neurophysics. This culminated in an internship at the Zuckermann Institute at Columbia University in New York, NY, USA. She proceeded with an MSc in Science at Radboud University, pursuing a dual specialisation. The first was Neuroscience, including a research internship and thesis on emotion recognition with AI-driven visual neuroprosthetics at the Donders Institute, Nijmegen. The second specialisation was Science in Society, which introduced her to philosophy of science and technology. In her second master's thesis, she explored transdisciplinary perspectives on ethical dilemmas regarding the same visual neuroprosthetics technology that she worked on before.

In September 2020, she started her PhD project at Delft University of Technology as part of the ESDiT (Ethics of Socially Disruptive Technologies) consortium. During this time, she has been an invited speaker multiple times, including at a large-scale transdisciplinary conference, "The Conference", in Malmö, Sweden, 2023. Her work on empathy and autism has been picked up by academic peers from various disciplines around the world – inspiring reflection on the meaning of empathy in autism research. Her work initiated a public discussion with meta-ethicist Colin Marshall in SERRC (Social Epistemology Review and Reply Collective), which ended in a collaborative piece – a novelty for the platform. She has also been active as a member of the 4TU.Ethics PhD council in 2021, the Diversity & Inclusion committee of her faculty (Technology, Policy, and Management, TU Delft) from 2022 onwards, and various groups and initiatives within the ESDiT consortium. She was also a yearly recurring guest lecturer for the course "Framing Knowledge" at Radboud University. After finishing her PhD project, she will return to Eindhoven as a postdoctoral researcher at Eindhoven University of Technology where she will explore the ethics of technologies of prospection – a project that is also part of the ESDiT consortium.

Next to her academic activities, she published a Dutch fiction novel *Aquinashove* (Boekscout, 2022) about student life during the Covid-19 lockdowns, in which she explored themes such as student mental health, finding purpose, and identity. She is

also active as a singer-songwriter and music producer. Other passions of hers include nature, animals, dance, and fashion.

List of publications

This list only contains publications and other output that relate to the research in this dissertation.

Written publications:

Bollen, C. (2023). A reflective guide on the meaning of empathy in autism research. Methods in Psychology, 8, 100109.

Bollen, C. (2023). Towards a clear and fair conceptualization of empathy. Social Epistemology, 37(5), 637-655.

Bollen, C. (2023). "Empathy as a Virtue: A Response to Marshall" Social Epistemology Review and Reply Collective **12**(11): 94–100.

van Grunsven, J., van Balen, B. and Bollen, C. (forthcoming). Three Embodied Dimensions of Communication: Phenomenological Lessons for and from the Field of Augmented and Alternative Communication Technology. Phenomenology and the Philosophy of Technology.

Invited talks:

Academic

"Both different and the same: neurodiversity & technology" *Symposium Being human in the digital society: on technology, norms and us*, Delft (2022)

"Framing autism" *Guest Lecture Framing Knowledge* Radboud University, Nijmegen (2020, 2021, 2022, and 2023)

Non-academic

"Design for and with empathy" *The Conference*, Malmö (2023)

"Empathie en high-tech OC" *ISAAC-NF congres: Luister je echt naar mij?,* Doorn (2022)

"Neurotypical or Neurodiverse?" *Prometheus Problems Philosophical Café*, Delft (2021)

Conference talks:

"Epistemic injustice as a motivation for conceptual engineering" *Philosophy and Interdisciplinary Research Conference*, Leuven (2022)

"Towards an inclusive notion of empathy." *Responsibility, Psychopathology and Stigma Conference*, Antwerpen (2021)

Poster "Introducing AAC Technologies in the space of empathy." *It's Alive! 4TU.Ethics Bi-annual Conference*, Wageningen (2021)

Other:

Animated video "Why everything you know about empathy is wrong" ESDiT YouTube channel (2021)

Appendix: Literature included in systematic review Chapter 2

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Beck, T. J. (2018). Tracing disorder across theories of autism, empathy, and mental health care. *Disability & Society*, *33* (8), 1303-1326. doi: 10.1080/09687599.2018.1491389

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Appendix: Interview guide

1	a. Which AAC technology(-ies) do you use? b. For what and in what way do you use them? c. Why do you use AAC technology?
2	a. Do you identify as neurodivergent? If yes, how? (think for example of autism ADHD, ADD, HSP, dyslexia etc.) b. Do you think this impacts how you use AAC technology? If yes, how?
3	a. Do you have the feeling you can be yourself when you use the technology? b. If not, what causes this? c. What could make your experience better?
4	a. Do you feel that the use of AAC technology influences how you are respected by others? b. What could make your experience better?
5	a. Does the technology help you explain to others what you think or feel? b. Do others understand you better? c. What could make your experience better?
6	a. Do you experience negativity or stigma around AAC technology in society? b. If so, how does this impact how others treat you?

7	a. What kind of relationship do you have with your AAC technology? (Is it as a part of yourself, a partner, an enemy, a neutral tool, something else you can compare it to?) b. What makes you experience it in this way?
8	a. Is the use of the technology empowering or limiting? b. In which ways is it empowering? c. In which ways is it limiting?

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Simon Stevin (1548-1620)

'Wonder en is gheen Wonder'

This series in the philosophy and ethics of technology is named after the Dutch / Flemish natural philosopher, scientist and engineer Simon Stevin. He was an extraordinary versatile person. He published, among other things, on arithmetic, accounting, geometry, mechanics, hydrostatics, astronomy, theory of measurement, civil engineering, the theory of music, and civil citizenship. He wrote the very first treatise on logic in Dutch, which he considered to be a superior language for scientific purposes. The relation between theory and practice is a main topic in his work. In addition to his theoretical publications, he held a large number of patents, and was actively involved as an engineer in the building of windmills, harbours, and fortifications for the Dutch prince Maurits. He is famous for having constructed large sailing carriages.

Little is known about his personal life. He was probably born in 1548 in Bruges (Flanders) and went to Leiden in 1581, where he took up his studies at the university two years later. His work was published between 1581 and 1617. He was an early defender of the Copernican worldview, which did not make him popular in religious circles. He died in 1620, but the exact date and the place of his burial are unknown. Philosophically he was a pragmatic rationalist for whom every phenomenon, however mysterious, ultimately had a scientific explanation. Hence his dictum 'Wonder is no Wonder', which he used on the cover of several of his own books.

We have a general idea of what the term empathy *refers to. We typically use the concept in a normative way - to express appreciation, concern, value, risks, etc, - with regard to how we relate to one another. However, the exact meaning of the concept is far from agreed upon. As such, it actually is unclear whether and how we can fairly use this concept for ethical reflection and guidance. But we do so anyway, and that is not without problems. One of these problems is that there is a strong link between how empathy is operationalised in research and the exclusion of autistic empathy. Furthermore, communication technologies (CTs) significantly shape our social lives and our ways of relating to one another, and it is unclear how to best understand empathy in light of this.*

The aim of this dissertation is to expose present-day problems with how we understand empathy and provide a solution: an account of empathy as a normative concept to better serve the 21st century and its social and sociotechnical challenges. *The research in this dissertation highlights a fundamental and humbling notion: my experience of the world is not the same as yours, but also not completely disconnected from it. Across differences, along similarities, we share a world with each other. I hope that this work on empathy 2.0 can help us understand and navigate that a bit better.*

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