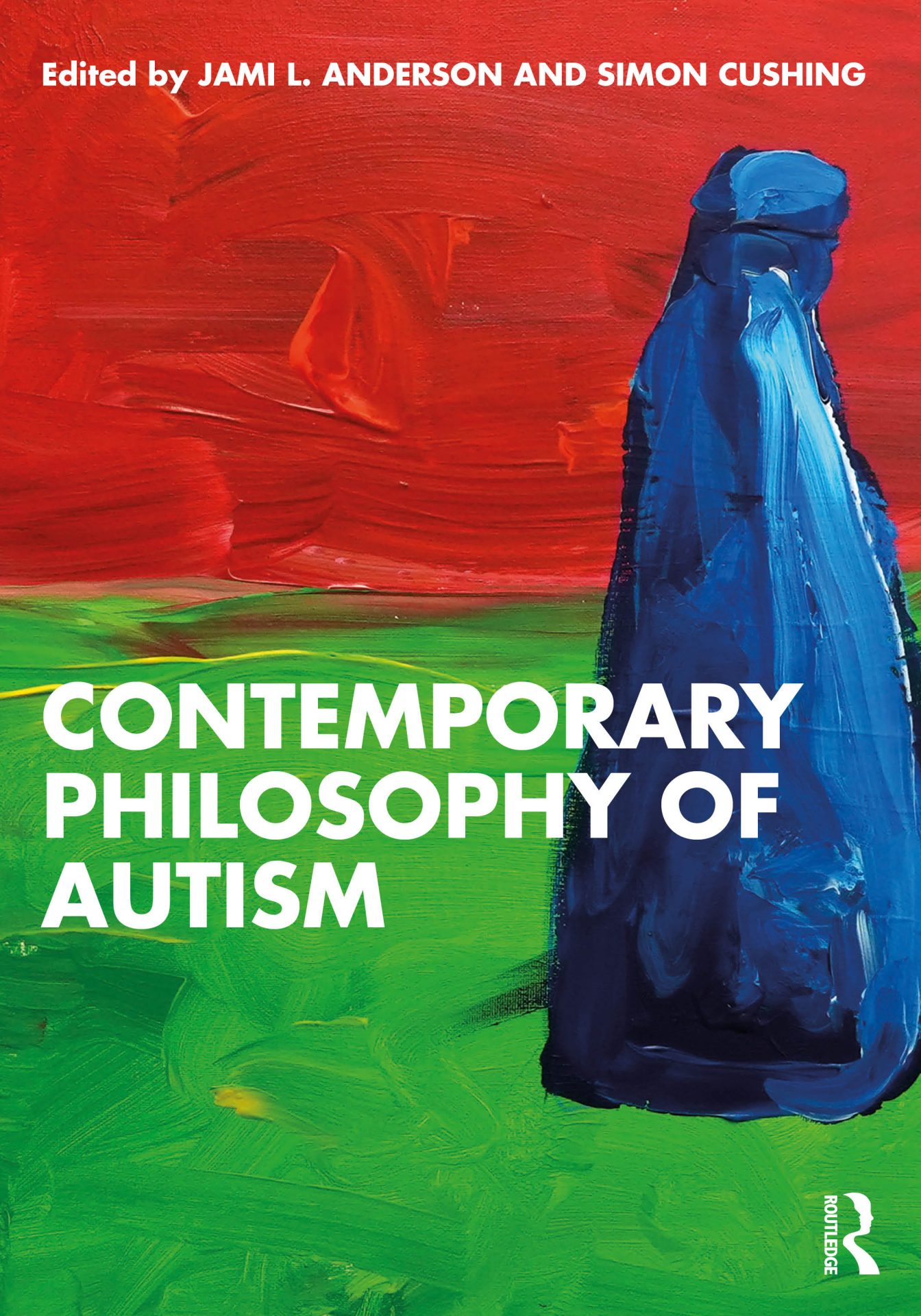
Edited by JAMI L. ANDERSON AND SIMON CUSHING

CONTEMPORARY PHILOSOPHY OF AUTISM



ROUTLEDGE

CONTEMPORARY PHILOSOPHY OF AUTISM

This volume explores interesting and emerging philosophical questions related to autism. It sheds light on the ways in which cultural attitudes about autism have changed in the decade since the editors published their first volume on the philosophy of autism.

So much about autism has changed in the last decade. Cultural attitudes about autism are far more nuanced. Self-identification as autistic has exploded, as have discussions of the political and social implications for being an out autistic person. This volume approaches a wide range of issues that autism raises in social and political theory, ethics, philosophy of social science, epistemology, metaphysics, and law. The issues addressed include moral responsibility, autism and gender, knowledge acquisition, the double empathy problem, social cognition, vulnerability in interpersonal communication, masking, the neurodiversity movement and destigmatization, and the effectiveness of ABA therapy. Each of the contributors, many of whom self-identify as autistic, has a personal connection with autism.

Contemporary Philosophy of Autism will appeal to researchers and graduate students working in philosophy of mind, philosophy of cognitive science, epistemology, philosophy of medicine, and disability studies. It will appeal to those working in other academic fields such as developmental psychology, neuropsychology, cognitive psychology, and education.

Jami L. Anderson is a Professor of Philosophy at the University of Michigan-Flint and an Associate Teaching Professor in the Wayne State University Law School. She co-edited *The Philosophy of Autism*. She is currently working on a monograph titled *Special Risk of Wrongful Execution: Atkins v. Virginia and the Illusory Prohibition of the Execution of Intellectually Impaired Criminals in the U.S.*

Simon Cushing is a Professor of Philosophy at the University of Michigan-Flint, co-editor *of The Philosophy of Autism*, editor *of Heaven and Philosophy* and *New Philosophical Essays on Love and Loving*. He is currently working on a monograph about the metaphysics of abortion.

"An important addition to analytic philosophy of autism".

Robert Chapman, *Assistant Professor in Critical Neurodiversity Studies, Institute for Medical Humanities at Durham University, UK*

"This volume captures crucial perspectives in that the authors of each paper include at least one with direct, personal experience of autism, and thereby provides a unique and invaluable contribution to the literature on autism. It should interest anyone concerned with what autism is like "from the inside" and also the felt adequacy of various techniques designed to mitigate its effects. It also provides insightful discussion of the broader questions of how to describe inner experiences in a way that makes them intelligible to those who have not had them, how to determine whether a response is empathetic, and what it is to be a person who endures through time, and to be an autonomous—and moral—agent".

Janet Levin, *Professor Emerita of Philosophy, University of Southern California, USA*

CONTEMPORARY PHILOSOPHY OF AUTISM

Edited by Jami L. Anderson and Simon Cushing

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"My part of this project is dedicated to Thomas and Frederick, my two favorite people".
—Jami L. Anderson

"I dedicated my portions of this book to Thomas and Frederick—sorry about the genes, but here's a book dedication, at least".
—Simon Cushing

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INTRODUCTION

Jami L. Anderson and Simon Cushing

Just over a decade ago we published the book *The Philosophy of Autism*. At that time, the culturally dominant attitudes about autism were extremely negative. Autism was regarded as a tragic, debilitating condition that rendered those who had it incapable of independent, non-institutionalized living. Organizations like Autism Speaks were regarded as benign, and Simon Baron-Cohen (a major target of the essays in that volume) was otherwise almost universally lauded. Self-identifying as autistic was practically unheard of. Philosophical writing on autism was minimal.

Much about autism has changed in the last decade. Teens and adults who self-identify as autistic now make up a significant minority population. There are student clubs for autistic students at many universities, and online discussions concerning the political and social implications of being an "out" autistic person are popular. Philosophical publications that address the issues raised by autism sympathetically, and often from a first person perspective, are increasingly common. Philosophical issues that were pressing and novel at the time of our first collection are no longer so, and new ones have moved to the fore. For all these reasons, we believe it is time for a new volume of essays exploring the philosophical issues concerning autism.

For this volume, as with the first, we collected papers predominantly in the analytic tradition of philosophy. We include papers that approach issues autism raises in social and political theory, ethics, philosophy of social science, epistemology, metaphysics and law. In each of the papers, autism is the focus of the papers, not an incidental example used to motivate a discussion only tangentially relevant to autism. Moreover, in a noted advance over our earlier volume where only one of the authors explicitly identified as autistic, now every paper is written by at least one author with direct, personal experience of autism and thus every chapter has an authorial authority heretofore all-too-often lacking in academic discussions of autism.

It was already true in the earlier volume that each author had their own view on what autism was, but, as will become apparent in the chapter synopses that follow, the diversity of views has only multiplied in the intervening years.

* * ** *

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It is a common experience of autistic individuals to find themselves charged, most benignly, with being "funny," and less benignly with being outright rude, when they themselves intended no such thing. That is, autistic speakers experience themselves being misunderstood in ways that often incur social costs and provoke censure from others, which can in turn result in negative self-assessment. In chapter 1, "Autistic Vulnerability to Intellectual Arrogance," Sydney Maxwell offers an analysis of this phenomenon that locates the cause of the misunderstanding in background assumptions commonly held by the non-autistic interlocutors. Maxwell goes further: using examples of cross-cultural misunderstandings, they argue that adopting the "common sense" background assumptions that are at the root of the misunderstandings that afflict autistic-allistic communication is a form of intellectual arrogance on the part of the allistic party. These miscommunications could be avoided if the allistic interlocutor behaved in the way that autistic speakers much more often do, that is, to regard their assumptions as defeasible and be much more ready to adopt the strategy of "conversational repair," something that is expected in cross-cultural communication more generally.

Maxwell's analysis discusses briefly the difference between mere criticism of an action and moral censure of the actor (a rude *action* versus a rude *person*), and the necessity both to recognize that autistics are not being rude in these cases of miscommunication (where a non-autistic interlocutor would be), while at the same time retaining a view of autistics that allow them the moral capacity to be rude should they so choose.

Are autistics capable of being morally responsible? In decades past, it was assumed that the answer to that question was always "no." Indeed, according to some a defining feature of autism was the total lack of moral capacity. There was a book published in the early 2000s with the title "I'm not naughty, I'm autistic," which referred to the author's child. What the title implies is that behavior that would be evidence of naughtiness in a neurotypical child should not be so construed when the child is autistic. This claim takes a particular stance in the debate over what the conditions for certain kinds of *responsibility* are, specifically that autism can be a reason not to hold individuals responsible for certain usually censure-incurring acts. Also taking a stance is Cornell philosopher David Shoemaker, who, in *Responsibility from the Margins* (2015), argues for a threefold notion of responsibility, from the strongest of which, accountability, "those with high-functioning autism… are exempt or seriously mitigated". To be exempted is a two-edged sword, of course: on the one hand, autistic people often complain of being misunderstood, and that non-autistic people take offense to behavior where no offense is intended. Indeed, it is more serious than that: the police have imprisoned or even killed autistic people when people who knew them well knew that they were merely exhibiting distress. On the other hand, however, to be exempt from responsibility means that one lacks an important moral power. To use the influential language of P.F. Strawson, it means that others are taking the "objective stance" towards one, treating one as if one were an animal or a machine to be explained but not to be regarded as a person among persons.

Ann Whittle takes on several tasks in chapter 2, "Moral Responsibility and Autism," the first of which is to challenge Shoemaker on two fronts. First, she challenges his claim that autistic agents lack empathy, noting both that recent studies undermine that idea, and that non-autistics struggle to understand autistics just as much as the reverse (the "double empathy problem") without that lack of understanding being used as evidence for a lack of empathy. Next, Whittle takes on Shoemaker's account of accountability, arguing that a better

analysis of moral responsibility is the "control-based, reasons-responsive approach," notably defended by Jon Martin Fischer and Mark Ravizza (Fischer and Ravizza 1998). Finally, she defends this account against an attack by Nathan Stout, who has claimed that it has counterintuitive results when applied to cases involving autistic actors (Stout 2016). Drawing on a bank of rich examples, Whittle argues that the sensory and social difficulties familiar to autistics explain why the reasons-responsive account does not have to hold an autistic actor responsible for unintentionally offending a friend in the way that Stout contends it does. Whittle defends a fine-grained account both of empathy and autism that allows a case-by-case analysis of autistic responsibility that allows autistic people both moral agency and occasional exemption – not on the basis of empathy deficits, but instead on epistemic grounds.

Many psychologists have claimed that an element of autism is an inability to empathize. In response, the autistic advocate Damian Milton has suggested that there is a "double empathy problem": it is not that autistic people have an empathy deficit in comparison with neurotypicals, rather, members of each group are less able to empathize with members of the other, but do not struggle in the same way to empathize with members of their own (Milton 2012). In chapter 3, "Autism, the Double Empathy Problem, and Feeling the Emotions of Another Person," Sam Fellowes assesses Milton's argument. A first step is pointing out that Milton has not offered a clear definition of empathy. A common distinction in the literature is between *cognitive* empathy and *affective* empathy, where the former requires adopting the viewpoint of another, while the latter requires feeling what that other feels. Amy Coplan offers a more fine-grained taxonomy, dividing each kind into three sub-variants (2011). The most prominent psychologist who has characterized autism as a deficit in a kind of empathy is Simon Baron-Cohen, and it is clear that what he has in mind falls under the category of cognitive empathy (Baron-Cohen 2005). Fellowes argues that the phenomenon Milton has posited, whereby both neurotypicals and autists struggle to empathize with each other can, when combined with further assumptions about social understanding, plausibly account for claims like those Baron-Cohen has forwarded without implying that autistics are disordered. In particular, Fellowes considers Robert Chapman's application of Wittgensteinian language games to social understanding, as well as recent applications of 4E cognition to the same phenomenon (Chapman 2019). However, matters are different when one instead considers one particular aspect of *affective* empathy, specifically *feeling what someone else feels*. Fellowes argues first, that the double empathy problem, even if it picks out a real two-way phenomenon, does not rule out the possibility that autistics both lack this ability disproportionately and, more strongly, are disordered in doing so. Drawing on personal experience, Fellowes suggests that he himself lacks this ability, and that the autistic people he knows well are in the same boat, and that he feels this as an impoverishment to the extent that if there were a medication to treat it, he would take it. However, Fellowes insists that this particular inability has no bearing on the status of himself or any other autistic individual as a moral agent, arguing that, if anything, autistic people are more committed to the rules of morality than are neurotypicals.

Famously, "false belief" experiments like the "Sally-Anne Test", whereby autistic children fared worse than similarly aged neurotypicals at attributing false beliefs to other individuals in circumstances where those false beliefs would be reasonable to hold, have been used to argue that autistic people generally have a lesser ability to interpret the thoughts of others (Baron-Cohen et al. 1985). Relying on that argument, Baron-Cohen popularized the still-influential view that autism involves an impaired *theory of mind* (ToM).

There are two competing camps explaining what it is to have a ToM. One camp is the "Theory Theory" view, whereby an individual faced with the behavior of another person acts like a scientist constructing a theory to explain some natural phenomenon, and the beliefs that the interpreter attributes to the interpretee are analogous to the underlying forces or particles that begin as theoretical constructs. The other camp, an alternative to this "third person" approach, is the "Simulation Theory," whereby the interpreter takes a first person approach to the other person, putting themselves in the other's shoes and running a mental simulation of how they would behave in those circumstances.

In chapter 4, "Autism From the Second Person Perspective," Francisco García challenges both the ToM model of understanding others in social interactions and the cognitive psychology approach that incorporates it. Instead of third or first person approaches, he defends the Second Person Perspective approach and argues that it can be the basis of a non-cognitive, non-disorder view of autism which in turn suggests an externalist model of treatment. García notes that ToM accounts fail to persuade when the phenomena requiring explanation are more basic forms of social interaction that require cooperation, like dancing or cooperating in moving heavy items. That these are possible suggests that the cognition-heavy processes required by both Theory Theory and Simulation Theory cannot be what is happening. Furthermore, García notes the phenomena picked out in discussions of the Double Empathy Problem: that there is ease of interaction and friendship among autistic people of an equivalent level to that among neurotypicals, as well as misunderstandings on both sides of the other. Not only that, but autistic people of a certain level of development might actually be *superior* at ToM-style interpretations of others precisely because they cannot rely on the direct, gestalt-level interpretations of faces and bodies on which much interaction actually relies. García suggests that Uta Frith's "weak central coherence" view (Frith 1989), whereby autistic individuals tend to focus on specific details to the detriment of seeing the whole picture, might be expanded to explain these second-person difficulties. However, given that there are many circumstances in which this facility with detail is a positive strength, we should not characterize autistic people's struggles in interacting with neurotypicals as disordered, and should further abandon the internalist cognitive model of treatment (which, combined with a biomedical model of psychological disorder has conspicuously failed to identify an internal mechanism that explains autism) and instead, drawing from the 4E view of cognition, model our "treatment" of autism on the externalist treatment of addiction, whereby the slogan is "change the environment, not the individual," and build "cognitive scaffolding" that facilitates ease and comfort of autistic individuals in navigating their social environments, without regarding their unique psychology as disordered or inferior to neurotypicals for whom the social world has been overwhelmingly tailored.

In chapter 5, "Autism and Gender," Ruby Hake and Emily Hughes discuss the tangled history of autism and gender and conclude with a rallying cry for a critical phenomenology of the relationship between the two. From its earliest medicalized beginnings in the work of Leo Kanner and Asperger, autism was seen as overwhelmingly a male condition, a pairing that met its apogee in Baron-Cohen's "extreme male brain" theory of autism, with its essentialization of gender traits (Baron-Cohen 2002). As Hake and Hughes recount, a recent rebuttal to this association is the proposal of a Female Autism Phenotype, which posits that girls and women have been underdiagnosed as autistic because of the different ways females express autism, including the claims that, while males and female autistics alike have

"restrictive and repetitive" interests, typical female interests fly under the diagnostic radar as they tend to be more socially acceptable topics like animals or fictional characters, or that females tend to internalize their symptoms and are more adept at camouflaging behaviors. While this proposal attacks the idea that autism is essentially a male phenomenon, it shares the gender essentialism that we see in the original theories. An alternative approach involves rejecting essentialism, as we see in the view that gender is a social construct. However, Hake and Hughes point out that both essentialist and anti-essentialist views of gender are to be found in autistic people's self-conceptions: while some reject gender entirely as part of their views of themselves, others, including many trans autistics, view their gender as innate, something that they discovered rather than something that was constructed by others. Furthermore, there is perhaps a tension in adopting an anti-essentialist view of gender while retaining an essentialist view of autism. Hake and Hughes suggest that the Neurodiversity Movement might offer a way to address the relationship between gender and autism that is inclusive to autistics who hold different metaphysical views of their own gender, and which can avoid any necessary tension between essentialism of one and anti-essentialism of the other by adopting what J.M. Ellis calls "strategic essentialism," whereby essentialist terms are used to engage those who presuppose them by a critical movement whose ultimate goal is to dissolve them (Ellis 2023). Noting that not everybody in the Neurodiversity Movement is on the same page, Hake and Hughes take from it its intersectionality, and commitment to respecting each individual's unique experience and self-conception, while at the same time critiquing the (often oppressive) social structures within which they have developed that self-conception. They believe that the *critical phenomenology* born in the work of Maurice Merleau-Ponty, Simone de Beauvoir and Franz Fanon, whose goal is liberational, should turn its gaze on to the convoluted intersections of neuro-and gender-diversity in a way that will benefit and empower those currently medicalized or essentialized by either in ways that they find oppressive.

One of the major goals of the neurodiversity movement has been what Quinn Hiroshi Gibson and Sarah Arnaud refer to in their chapter as *destigmatization*. This is a political objective aiming to empower a formerly marginalized group, which has as a key element replacing the view of autism as a pathology with the idea that it is instead an identity. This movement has met with a good deal of success, but this has been accompanied by various forms of backlash. In chapter 6, "Autism, Care, and the Limits of Destigmatization," Gibson and Arnaud identify four distinct strands in the backlash, none of which questions the call for greater inclusion but instead details different ways in which the movement, as its critics understand it, will have counterproductive effects on the very people it aims to serve.

Gibson and Arnaud find that each of the four kinds of accusation leveled at the neurodiversity movement – that it is predicated on the assumption that autism is never harmful to autistic people, that it will obscure the real scientific status of autism, that it will cause autistic people to lose access to therapeutic care, and that it will lead to overdiagnosis – and finds each of them rests on a too-crude characterization of the movement's aims and makeup. However, Gibson and Arnaud identify what they take to be a genuine concern for the movement's goal of destigmatization: that it opens the movement up to *elite capture*, a phenomenon where a vocal minority commandeer a movement and use it to serve their aims at the expense of more vulnerable members whose needs it is most important that it should serve. In particular, they charge that the goal of destigmatization can result in "between-group" elite capture, where non-autistic self-appointed allies define success in terms of deriving

social cachet from "virtue signaling" at the expense of, in particular, non-verbal autistic people. If no members of the very diverse autistic community are to be left behind, Gibson and Arnaud suggest that the dangers of elite capture can be avoided by employing the *ethics of care*, specifically the variant defended by Joan Tronto, the goal of which is to fashion the care needed to the specific needs of each individual without judgment of any (Tronto 1998).

There is a disconnect between the public at large and people who self-identify as autistic over what advocating for autistics comprises. When politicians mention autism it is as a crisis that requires eliminating. The target audience of these pronouncements is worried parents, and the beneficiaries are those in the Applied Behavior Analysis (ABA) therapy industry, whose services are now provided as part of special education services in public schools because ABA therapists claim ABA therapy is the only way to ensure autistic children have a normal life. The next two chapters put ABA in the crosshairs and charge that it is not only not any kind of solution, it may rise to the level of a human rights violation.

Jami L. Anderson titles chapter 7, "Elephants and Armadillos: Anti-Autistic Ideology Forms an Anti-Autistic World," after an analogy given by ABA defender Margaret Anderson who claims that, even if, as critics of ABA suggest, ABA has no business attempting to turn autistic elephants into neurotypical armadillos, it is still essential for the good of those elephants to "equip [them] to live in the world we currently have," which is designed by armadillos to suit their needs (2007). Anderson's purpose in discussing this analogy is to lay bare the extent to which the ideology of ABA has shaped the very public conception of *what it is to be autistic* to the detriment of those labeled – ABA has played a huge part in both creating "autistic" as a concept and making a hostile world for autistics. First, Anderson digs into the history of ABA, beginning with the unethical work of its founder, controversial UCLA professor and clinical psychologist (and co-founder of The Autism Society of America) Ole Ivar Løvaas. Løvaas was the person most responsible for bringing autism to the attention of the wider US public. Influenced by Skinnerian behaviorism, Løvaas used rewards and punishments to control the behavior of the pre-school aged autistic children in his care. He presented autistic children as "little monsters" (Chance 1974), broken human beings whose lives would be nothing but nightmares for themselves, their families and society at large unless they underwent the intensive intervention that only his clinic provided. Obviously, given the breathtakingly cruel practices he was endorsing, the only way the treatment could be justified is if it was in the service of preventing some greater evil, and so he exerted great effort in painting a picture of the terrible life with "untreated" autism. Today ABA advocates insist that ABA is "not what it was." But the picture these advocates continue to paint of both an untreated autistic life and the benefits of ever-earlier ABA intervention is as pernicious as Løvaas's. Tens of thousands of ABA service websites assert as fact that all autistic children engage in extreme *autistic behaviors*—obnoxious, self-harming and disgusting behaviors—that make autism a terribly debilitating condition. In fact, ABA websites assert that, without ABA therapy, these negative autistic behaviors worsen as the child gets older, creating an unmanageable if not dangerous adult. These claims are unsupported by evidence yet asserted so frequently and emphatically that most people accept without question that autistics are inherently violent, incontinent and suicidal. Unsurprisingly, this anti-autism narrative inspires anti-autistic bullying and violence. So long as contemporary ABA therapists sustain these anti-autism narratives they fuel the very anti-autism bullying and violence they claim is the reason ABA therapy is necessary for autistic children. That is, to return to the original analogy, instead of helping elephants to live in an armadillo

world, ABA ideology actively works to make the armadillo world anti-elephant. Anderson concludes her chapter with advice for former ABA advocates who acknowledge the wrongs it has participated in and wish to help undo some of the harm it has wrought.

While Anderson's critique of ABA does not depend on taking a stance on neurodiversity, in chapter 8, "Ain't Misbehaving: Scrapping Applied Behavior Analysis," Dani Maskit and Barbara Fultner offer a partizan anti-ABA manifesto. If we accept the Neurodiversity Paradigm and thus that Autism is a naturally occurring and valuable difference in neurocognition, then it becomes clear that ABA not only does not, but cannot "work," and claims that it does are themselves denials of autistic identity. Where Anderson denied that the chief behaviors that ABA identifies as "autistic" are inherently so, Fultner and Maskit begin by asserting that there are certain autistic behaviors (they focus on avoiding eye contact, stimming and masking) but that, far from being harmful, they are the equivalent of cultural markers, and in treating them as maladaptive, ABA amounts to an attempt at cultural genocide. Furthermore, while ABA's advocates claim it is theoretically neutral, Fultner and Maskit charge that it only makes sense on behavioristic assumptions like those presupposed by Simon Baron-Cohen, who is *persona non grata* to autistic advocates. Finally, Fultner and Maskit propose what they take to be a more enlightened model of autism as a "form of life" in their "biosocial account," drawing on, among other resources, work in Gibsonian ecological psychology. Once one understands autism this way, they assert, one realizes that its study should not merely be the province of psychology and neuroscience but also of anthropology and philosophy, and this expansion of perspectives will result in reversing the ABA-dominant practice of stifling the voices of autistics, to the benefit of all.

In online forums like Reddit (/r/autism), a language has emerged to describe common experiences among people who self-identify as autistic. These include "stimming," "info-dumping," and "masking," the latter of which is a philosophically fascinating phenomenon. As Emil Eva Rosina and Elin McCready describe, in chapter 9, "Masking as Persona Flexibility," the concept of masking involves the idea of "hiding one's true self," which immediately raises the questions of what comprises one's "true" self, and what one's motivations for so doing might be. Rosina and McCready contend that feeling that one is hiding one's true self is *central* to autism as a lived experience, and not a *result* of autism. They reject the traditional view of masking as a way of hiding one's autism from neurotypicals as flawed in three respects. First, masking is not a matter of concealing specifically autistic traits (like the aforementioned stimming and info-dumping), because, second, it is not a practice unique to autistics. It is, in fact, a practice common among neurotypicals that is only remarkable in autistics because of the felt psychic or moral costs incurred as a result. Third, masking is not a binary phenomenon with only the masked persona as one option and one's authentic self as the other. Instead, masking is the process of persona flexibility whereby one signals one's personality only partially and indirectly to one's current interlocutor.

Why is persona variance unremarkable in neurotypicals, but widely discussed as masking in autistic communities? Rosina and McCready posit that it is because a core feature of autism is not some psychological deficit, such as an impaired theory of mind, but instead internal norms of high sincerity, which make presenting in different ways to different people as personas with different beliefs seem dishonest and inauthentic. Distinguishing between what they call *social* sincerity (which requires that one not claim to believe when presenting as one persona propositions that one does not really believe) and *discursive* sincerity (which requires that one positively communicate what one *does* believe, particularly in cases where

another is expressing opposing viewpoints), Rosina and McCready argue that autism (not uniquely, but universally) involves scoring highly on both axes, in a way that requires that the autistic interlocutor choose among three strategies: mask, or adopt a persona that will be acceptable to an interlocutor (become "the social chameleon"), *un*mask, and risk seeming "inappropriate," driven by discursive sincerity to exhibit another "autistic" trait of "infodumping" (become "the clown"), or withdraw from the fray (become socially isolated). The combined model of masking as persona flexibility and autism as high sincerity enables Rosina and McCready to make sense of commonly expressed autistic experiences of being "gaslit" by the world: observing easy persona-flexibility among others, one sees them as insincere and finds their behavior a betrayal in a way that they, with lower standards of sincerity and engaging in persona flexibility as a normal practice of communication, find mystifying. A useful analogy is that of the "dogwhistle," such as when rightwing politicians intentionally send a signal to their zealot followers in a way that they can plausibly deny to their more moderate followers. This is a sinister skill to those who observe it, but typical neurotypical behavior involving revealing different personas to different members of a social group appears just as sinister to autistic observers with high sincerity norms.

One common feature of the autistic experience, so common that many argue that it is at least partly definitive of autism, is sensory hypersensitivities. The effect of these sensitivities on the lives of those who have them is profound and can help to explain other very widespread autistic phenomena such as meltdowns. Those who have them, however, also report that their experiences are downplayed, minimized, and outright questioned by the neurotypicals who surround (and often parent) them. What happens if, instead, these sensitivities are acknowledged, and furthermore, we question the idea that it is those who lack them that have the correct or privileged access to the "real" world? Eric Kraemer, a professional philosopher who has long worked in the field of epistemology, worked with Ira Kraemer, who self-identifies as autistic and is intimately familiar with sensory hypersensitivities to, first, canvas the extent and different kinds of sensitivities, as detailed in numerous studies, and second, assess how removing a bias towards neurotypical modes of knowing would affect the various academic epistemological theories. Chapter 10, "Re-Examining Knowledge: Sensory and Social Challenges in the Autistic Community," considers kinds of knowledge (by acquaintance, competence, and propositional) and the individualist propositional knowledge accounts put forward by philosophers (including foundationalism, coherentism, reliabilism, virtue epistemology, in both the character trait and intellectual capacity variants). The Kraemers also consider accounts of non-individualist knowledge, such as social and standpoint epistemology, and how the typical ostracization autistic knowers experience can impinge on their roles in these to the detriment of all. They conclude that a fuller picture of the sensory life of (hypersensitive) autistic people will not only empower them as knowledge producers but increase society's stock of knowledge of the world around us all.

Over the course of this volume, we have seen a number of candidates for the defining feature of autism. However, as numerous studies have shown, there simply is *not* a defining feature or a set of necessary conditions that will apply to every person labeled autistic. In fact, there is not even agreement over what kind of conditions would qualify - set of behaviors or psychological or neurological or genetic condition. Purported explanations of particular sets of supposed autism indicators like mindblindness, weak central coherence or executive dysfunction all failed to explain a sufficient number of the accepted indicators. Amongst those conducting the studies and commentators thereon a consensus has emerged

that, indeed, there is no essence of autism. However, several writers have denied that this is a reason to be an eliminativist about the term. In chapter 11, "The Thing of It Isn't: Defending Eliminativism About Autism," Simon Cushing considers three prominent anti-essentialist yet also anti-eliminativist options concerning the status of "autism" as a kind: the realist view that it is a "property cluster kind" (Boyd 1989), the constructivist views that it is either a *shared political identity* or, as Robert Chapman (2020) argues, that it is a *serial collective*. Each of these views purports to find a kind of value in the term so that, even if "autism" is a vague, shifting concept with ill-defined boundaries, we should not discard it as we have terms associated with flawed theories of the past. Cushing remains unpersuaded, however, and explains why he believes eliminativism of the concept of autism is the most reasonable position in light of the evidence before us. This is an odd coda to a collection of papers *about autism*. However, given that the majority of the papers begins by clarifying which condition they will regard as definitive of autism before going on to examine issues surrounding people who embody *that* phenomenon, each of the papers would survive eliminativism of the inaccurate catch-all "autism" by replacing that word with a descriptor of the relevant criterion, say, sensory hypersensitivity.

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1

AUTISTIC VULNERABILITY TO INTELLECTUAL ARROGANCE

Sydney Maxwell

1.1 Introduction

Autistic speakers of which I am one, commonly report feelings of being misunderstood.[1] These feelings of being misunderstood manifest when the communicative intentions of an autist—i.e., an autistic person—are misinterpreted by their interlocutor(s). People tend to construe autists as doing things in speech that we do not take ourselves to be doing. While in some cases this can lead to seemingly benign kinds of miscommunication, such as when someone takes what was intended as a genuine assertion or question as a joke, the same basic phenomenon can also lead to harmful accusations—e.g., of being "rude"[2] or "weird".[3] I argue that such misunderstandings, given their frequency, cause serious harm to members of the autistic community, and as such special care should be taken to avoid them.[4]

Framing this problem in terms of the speaker's background assumptions on which they operate, I propose that the frequency of autists being misunderstood can be explained by a sort of intellectual arrogance often exhibited by allistic (non-autistic) interlocutors. Allistic speakers have a tendency to smuggle certain assumptions into the conversational backdrop because they take these assumptions to be matters of "common sense". Yet—as far as I am aware—no principled, much less predictive, account has been provided to explain where such assumptions are actually coming from. My suggestion is that the dogmatic way speakers tend to rely on their "common sense" assumptions in the interpretation of conversational exchanges opens them up to misunderstanding the intentions of others in potentially harmful ways.

I begin by presenting a simple exchange which I will center on as a paradigm example of the target phenomenon and introducing some key ideas in terms of which I analyze that exchange. In section 1.3, I entertain two common ways that the autist might be misinterpreted, both of which problematically involve reliance on unshared assumptions. Section 1.4 considers a path forward which relies on no such assumptions: conversational repair. There I argue that while repair initiated by the autist is not a viable option, repair initiated by the allistic speaker is not only possible but is in fact the best option for everyone involved. Section 1.5 explores why conversational repair is not already the default path

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forward for cases of this sort and highlights why the sort of misunderstanding at issue tends disproportionately to affect autistic speakers. And in section 1.6, I discuss how seriously harmful this kind of misunderstanding can be.

1.2 How Would You Like Your Tea?

The following exchange—borrowed from Surian (1996)— illustrates the kind of misunderstanding that often occurs between autistic and allistic speakers.[5]

1.2.1 Tea Exchange

Suppose that X is an allistic speaker, and A is autistic.[6]

X: How would you like your tea?
A: In a cup.

A's response here probably strikes you as inappropriate, because it is redundant. Most speakers would be quick to decide that A is not making a genuine attempt to communicate anything here, assuming instead that A's response should be taken non-literally—e.g., as an attempt to be funny, or even rude. While it may seem obvious that X's question is asking what *additions*—milk, sugar, etc.—A would like in their tea, the pragmatic operations which ground this interpretation are actually far from fully decisive. The inference to this interpretation rests heavily upon certain background assumptions that most speakers tend to take for granted—e.g., that tea is always served in a cup. Such an assumption may seem so basic as to be considered a matter of common sense such that one can assume that any given interlocutor takes it for granted in the same way, but the basis for such assumptions tends to go woefully underexplored. Before any assumptions are smuggled onto the scene, it will be helpful to start with the literal meaning of the question and work forward from there.

Taking the question "how would you like your tea?" literally, the matter of what additions should go in the tea is just one of many potential parameters of the question to be resolved (see Ginzburg 1995). That is, one goal X might have in asking this question could be to resolve the matter of what additions A would like in their tea—prompting the set of candidate responses in (1) below—but this is not the only goal consistent with the question. Points (2) and (3) below are some other plausible parameters.[7]

1 {with milk, with sugar, with milk and sugar, with neither milk nor sugar}
2 {in a cup, in a mug, in a glass, in a bowl}
3 {hot, warm, cold, iced}

In crafting their response to X's question, A will need to determine which of these parameters X means to target. To provide a complete answer, they would need to address all three, but complete answers are not typically called for in everyday exchanges (Roberts 2012; Carlson 2012).[8] Instead, partial answers to this sort of question are generally accepted—either because other parameters are thought to be already resolved, or simply because their

resolution is left to be addressed down the line. And deciding what sort of partial answer is appropriate will require A to look beyond the question's literal meaning. For current purposes, this will just mean that they need to assess what presuppositions are operative in the context of the exchange—i.e., what propositions X is taking for granted, and expecting A to take for granted as well in the interpretation of their utterance (Stalnaker 1978).

Presuppositions are an incredibly useful tool for utterance interpretation. They allow us to communicate much more concisely than we would otherwise, on the assumption that they are mutually held by all parties in a given exchange. In Tea Exchange, X crafts their utterance with certain presuppositions in mind, intending that A will know what kind of answer is appropriate based on just these presuppositions. For instance, if A sees X putting a kettle on the stove as they ask their question, A can infer that the tea will be served hot, and so recognize that parameter (3) is already resolved. That is, the speakers' joint awareness of the kettle on the stove makes the presupposition that *the tea will be served hot* mutual between them (Clark 1996). It might be nice if all presuppositions came from such simple observations as this, but unfortunately this is rarely the case. In actual conversation, presuppositions are more often thought to come simply from a speaker's existing background assumptions (Sperber and Wilson 1986).[9] My focus here will be on those assumptions which seem to be a matter of "common sense".

1.2.2 Unshared Assumptions

If the two speakers' background assumptions are not aligned in just the right way, misunderstandings are likely to occur. Where the context of the exchange is defective, such that the set of presuppositions that X makes differs from the set of presuppositions that A makes, it becomes more difficult for them to interpret one another accurately (Stalnaker 1978). That is, holding inaccurate assumptions about someone else's background information makes it more likely that you will misinterpret their intentions. In Tea Exchange, let's suppose that A's response of "In a cup", constitutes a genuine attempt to answer X's question; their intention was to communicate information about their tea-drinking preferences.[10] This would mean that A has genuinely taken X's goal in asking "How would you like your tea?" to be (at least partially) captured by parameter (2), presumably because their own background assumptions do not include any information which would rule out such an interpretation. Before moving on to see how this response is likely to be misinterpreted, let's take a moment to unpack how A might have reached this assessment.

In order to respond to X's question, A needs to determine which parameter—(1), (2), or (3)—X is trying to get at. For this, they will need to consult their relevant background assumptions to see if any candidate parameters can be ruled out. If these assumptions include a proposition like *tea is always served hot,*[11] then A could rule out parameter (3) as already resolved; they don't need to tell X that they want the tea served hot, since tea is *always* served hot. This ruling out, crucially, rests on an assumption that X shares this background assumption. In ruling out (3), A would not only be assuming *tea is always served hot* but also taking for granted that this assumption is mutual—that X assumes it too, and that both understand the other to assume it, and so on (Stalnaker 1978). So long as these assumptions hold, parameter (3) can be ruled out as being already resolved.

Similarly, if A's background assumptions include something like *tea is always served in a cup*, A could rule out parameter (2) as already resolved by the same rationale.[12] And if both

of these propositions are in A's background assumptions, they will be able to rule out both (2) and (3), and so opt to respond to (1) based on this process of elimination. In stipulating here that A's response is intended to be a sincere attempt at communication, I am in effect stipulating that the proposition *tea is always served in a cup* is not in A's set of background assumptions. Because of this, while they may be able to rule out parameter (3), they are unable to rule out (1) or (2), and so will judge that an appropriate partial answer to X's question could serve to resolve either of these so far unresolved parameters.[13] In crafting their answer, they may well be left to guess which parameter is more worthwhile to address;[14] and while they could opt to address both, such a complete answer is not usually expected in everyday exchanges. But just because A does not in fact share the background assumption that tea is always served in a cup, this will not prevent X from mistakenly believing that this assumption *is* shared. And this kind of defect in the exchange is what makes it ripe for misunderstandings to occur. With this defect in mind, let's consider how X might react to A's utterance.

1.3 Insincere Intentions

While I will ultimately argue that the best reaction for X to have here would be to initiate conversational repair by clarifying their question, it also seems that repair strategies are not opted for very frequently in everyday exchanges. Instead, it seems all too common that a speaker in X's position will be inclined to interpret their interlocutor as having an intention other than sincere communication. In Tea Exchange, there are two plausible directions in which such misinterpretation might proceed: X could interpret A as trying to be funny, or as trying to be rude. I will take these options in turn.

1.3.1 Humor

Supposing that X takes *tea is always served in a cup* to be a mutual assumption, they will see A's response as *prima facie* irrelevant. The utterance "In a cup" seems to assert something which is already presupposed, and so it contributes no new information to the context (see Sperber and Wilson 1986). So long as X is trying to interpret A as being cooperative overall, X could regard A's irrelevance as only apparent by supposing that they are in some way speaking non-literally, or that their intentions were something other than purely communicative (Grice 1975). Here, based on the perceived redundancy of A's response, X might conclude that their intention was that of evoking humor by stating the obvious.

Put another way, X might see the apparent redundancy as constituting a violation of their expectations. X probably expected A to provide an informative response to their question; they expected the information contained in the response would be new to them—i.e., something about A's tea-drinking preferences which was not previously a mutual assumption. If this is right, A's utterance clearly violates X's expectations, since X took it to already be mutually assumed that the tea would be served in a cup. And a violation of expectations like this can be seen as humorous so long as the violation is benign, or harmless, in the relevant context (McGraw and Warren 2010). While there are surely many complex factors that can determine the benignity or malignancy of a violation, it will be helpful to isolate just one factor for illustrative purposes: the power (im)balance between a speaker and their audience. In general, where social power is roughly symmetrical in this relationship, violations are more likely to be benign; and alternatively, where there is a significant imbalance

of social power, violations made by the lower-power party are more likely to be malign (Kant and Norman 2019).

If there is no power asymmetry between X and A—e.g., if they are friends, or otherwise peers—then the apparent humorous redundancy in A's utterance is likely to be well received as a joke. Recall, though, that humor was not A's intention. A thought that they were providing an informative response, so by interpreting the response as humorous instead of sincere, X is misinterpreting A's communicative intentions. And while it should be acknowledged that being misunderstood can in itself be harmful, this might seem like a case where the harm is rather minimal. While the autist is being misinterpreted, the misinterpretation seems to paint them in a positive light. After all, being perceived as funny is a good thing, so doesn't it benefit the autist to be seen as funny—rather than, say, stupid, rude, or condescending—even if they weren't trying to be? This sort of reasoning, I think, is what drives a lot of autists to mask or camouflage their autistic traits, and taking on the persona of a jokester or "class clown" is one way that this can manifest.

It is all too common for autists to learn quite early in life that most people won't like or accept us for who we are.[15] We learn quickly that being ourselves doesn't get us very far—socially or otherwise. Because of this, we tend to pick up behaviors that might be received more favorably by others—i.e., we learn to mask our autism (see Price 2022). And depending on someone's environment, their mask may take on different socially desirable personas. For instance, some may learn that being funny and putting on an act as the class clown makes others laugh, and that when they entertain others, those people will want to keep them around. They gain social acceptance by performing the role of a jokester, endorsing attributions of humor even when humor was not their actual intention. After all, it's better to have people laughing with you than at you, right? That is, we are glad to be perceived as funny in these kinds of situations, welcoming the class clown persona because it is better than the alternatives on offer. But being the best available alternative doesn't mean that it's not still a bad option.

Regardless of how flattering this kind of perception may be, it is still the result of being misunderstood. While in many cases it will be quite attractive to just lean into this sort of persona, elsewhere even being perceived as funny may come at a cost. Not all autists will want to make a misattribution of humor into reality by adapting their persona to match it. If a "class-clown" persona does not mesh with the autist's goals, such a misattribution of intentions is bound to cause deeper frustrations down the line.[16] Or if the content of the autist's seemingly redundant utterance was meant to be more significant than how it was interpreted, the autist is essentially not being taken seriously as a conversational participant.[17] It is frustrating to be misunderstood, no matter how good a light the misunderstanding happens to put you in, and the harm done by one's communicative intentions being frustrated in this way only stands to grow if such misunderstanding is a frequent occurrence.

1.3.2 Or Lack Thereof

Another plausible reaction X might have is to think that while A's intention seems to be that of evoking humor, such humor is misplaced. That is, X might not merely misattribute a humorous intent to A, but further judge this humor to be problematic. If, for whatever reason, A's apparent humorous redundancy is judged to be inappropriate—and thus malign—in the context at hand, X will likely take them not as being funny, but instead as being rude. Again, the norms for such appropriateness judgments are messy, so let's focus just on the factor of social power (im)balance. If X and A are not friends, but instead, say, X is A's

austere parent, X will probably not take kindly to what they perceive as A's attempt to be funny. Regardless of how sincerely the child intends to provide an informative answer to their parent's question, if the parent misinterprets that intention in this way, they will see the child as being disrespectful and rude.

A misattribution like this of not just humorous intent, but *ill-placed* humorous intent may further prompt one of two sorts of responses. First, if the parent suspects that the child was simply unaware of the norm they violated—that A did not know it would be rude to make a joke in this context—they might see fit to correct this bad behavior by criticizing it, teaching their child not to repeat it in the future. But alternatively, if the parent suspects that the child *was* aware of the norm violation—that A behaved rudely knowing full well that they were doing so—it will seem that a different sort of a reprimand is in order.[18] While both types of response are bound to happen some of the time, I think the latter is more often what happens to the autist—especially beyond the simple confines of a parent-child relationship.[19] And it is in this response of reprimand that the potential harms of misinterpretation are truly brought to light. The misinterpretation that takes place here is essentially the same as that in the previous section, but now there is more at stake. Being misinterpreted as funny can be frustrating, but being misinterpreted as rude is a more serious harm; it is bound to not only frustrate the autist but also damage their reputation, making it harder for them to participate in the social world altogether.

One can be accused of rudeness in any number of situations. For the autist, this will often happen regardless of their best attempts to be polite. In fact, this phenomenon is so characteristic of the autistic experience that the Autism Quotient—a questionnaire designed to test adults of average intelligence for autistic traits—includes the prompt "Other people frequently tell me that what I've said is impolite, even though I think it is polite" (Baron-Cohen et al. 2001). While this sort of misunderstanding is not one that I take to be unique to autistic speakers, it seems clear that autists will be disproportionately susceptible to being misunderstood in this way. Our tendency toward rigid thinking presents a challenge when tasked with deciphering how various social norms are to be applied in different situations, and allistic social cues will be of little help to us, since we often struggle to pick up on them (Jellema et al. 2009; Cashin and Yorke 2016). And, as before, even if such a misinterpretation does not seem like a terribly significant harm to the autist if it is a one-off or otherwise rare occurrence, if this kind of misinterpretation occurs regularly—as in fact seems to be the case—those small harms will add up.

1.4 Conversational Repair

At this point it may seem obvious that where X goes wrong in the above interpretations is in their making assumptions about what A knows or intends. This is, of course, correct, but as I will argue in section 1.5, this sort of error is often far from obvious in actual conversations. Before delving into why a speaker might opt for one interpretive strategy or another, let's get another option on the table: conversational repair.

1.4.1 Unaskable Questions

Conversational repair strategies are used when one conversational participant recognizes or suspects that a misunderstanding, or miscommunication, has occurred (Clark 1996). Focusing again just on the toy example of Tea Exchange, there are two sorts of repair to be

considered: 2nd turn repair, and 3rd turn repair. While I will ultimately argue that 3rd turn repair is the preferred route in this scenario, let's consider first 2nd turn repair.

Turn 1	X: How would you like your tea?
Turn 2	A: In a cup.

Taking the exchange as initially presented, you might think that the miscommunication occurs in turn 2, as A formulates a response to X's question and seems to do so inappropriately. Instead of responding as they do based possibly on nothing more than a haphazard guess as to the intentions behind X's question, perhaps they would be better served by initiating a repair strategy at this juncture. When A realizes that they are unsure of how they ought to respond, instead of guessing whether to address the parameter of vessels or the parameter of additions, they could instead ask for clarification from X before attempting to answer. While this option does have a *prima facie* appeal to it, I argue that it turns out to be something of a non-starter. That is, the suggestion seems perfectly reasonable in the abstract, but in practical application, it is hard to imagine a clarification question construction that is likely to be interpreted as sincere in this context.[20] Consider, for instance, the following candidate constructions:

Specific Repair

Turn 1	X: How would you like your tea?
Turn 2	A: Did you mean what kind of vessel I'd like it in, or what additions I'd like with it?

General Repair

Turn 1	X: How would you like your tea?
Turn 2	A: What do you mean by that?

I take these two sorts of clarifications to be the most readily accessible ways for A to initiate 2nd turn repair, given the analysis above, but I doubt either is likely to be taken seriously as a request for clarification in an everyday conversation. In Specific Repair, A asks for clarification in specific detail about the aspect of the question which is unclear to them. This clarification is meant to be interpreted as a literal disjunction, the resolution of which will help A to properly answer the initial question. However, it seems unlikely that it will be taken as such. Instead, much like the interpretations of the response "In a cup", addressed in section 1.3, it seems this question is more likely to come across as something of a joke. This is because it seems like a strange question to ask; it violates X's expectations. And if X still thinks that it is common knowledge between them that tea is always served in a cup, while this request for clarification *might* prompt them to question that assumption, I think it is more likely to strike them as some strange non-literal use of language on A's part. This is because, since X just takes it to be a matter of common sense that tea is always served in a cup, they quite immediately judge the first disjunct to be *obviously* not correct and the

second to be *obviously* correct.[21] As such, it seems to X that the answer to A's question is mutually obvious, and so the question doesn't actually require any verbal response—i.e., it's rhetorical. It is the obviousness that X experiences these judgments as having which makes A's actual meaning unavailable to them.

Alternatively, in General Repair, A does not target any specific element of the question that they are confused about, but instead asks for clarification about X's utterance on the whole. The trouble with general questions like this, though, is that they are often used to do something other than clarify a previous utterance, as their literal interpretation would have them do. Outside of very particular contexts, the form of such general clarification questions has been adapted into a means of challenging or questioning the previous speaker's intentions; since it is typically supposed that the literal answer to such questions is already mutually known, these utterances tend to serve more as conventional vehicles for the suggestion that there is some hidden, potentially nefarious, meaning behind the previous speaker's utterance.[22] And unfortunately, the prevalence of this conventional usage makes it much more difficult—if not impossible—to use the very same form to genuinely request clarification. Unless X has some good reason to rule out the possibility of A's using the question in this conventional way—and it seems they don't[23]—X is likely to take offense at this response, and they are unlikely to actually provide a clarifying answer to A's question.

The inference to this result is similar to that used to interpret the response "In a cup", in that X probably assumes A's intention is non-literal because they just think it is common sense that the question "How would you like your tea?" refers to what additions one would like in their tea. However, here they may not only be falling prey to the general disposition of assuming their own assumptions are shared by others, but also to an unconscious association between a speaker's background assumptions and their overall intelligence. If X thinks it is common sense to just automatically know what this question means, they may implicitly feel as though taking the clarification question seriously would reflect their thinking that A is less intelligent than them.[24] In the interest of being polite, they may be inclined to avoid doing anything which might suggest that their interlocutor is stupid, and so may be more willing to imagine A as being rude than as lacking knowledge that they are expected to have. And despite the fact that this implicit notion of intelligence as measured in one's background assumptions seems to miss the mark, it may nevertheless have a strong unconscious influence on X's behavior.

While these misinterpretations of A's attempt at 2nd turn repair are, of course, not guaranteed, their likelihood gives A reason to avoid this strategy. Since it is unlikely that A's attempt at asking for clarification will be interpreted as sincere, their repair attempt will not seem likely to give them the result they want, and so they could reasonably judge that it is not worth making. It seems, then, that they will be better off guessing at which parameter of the question to address; after all, if they guess right, there will be no problem at all, and if they guess wrong the consequences seem roughly on par with those of asking for clarification first. So, A is left right back where they started. Thankfully, there is one more path forward to be considered.

1.4.2 Opting Against Efficiency

The final path that this interaction might proceed along, which I endorse as the best option, is 3rd turn conversational repair. This strategy involves the initial question-asker, X,

recognizing in A's response that some miscommunication has occurred, and initiating repair in its aftermath (Clark 1996). This path avoids the potentially harmful consequences of making too many assumptions about one's interlocutor, but it also requires that X stray from those assumptions that they may be accustomed to treating as common sense. If X can recognize that the apparent redundancy of the response "In a cup", is not necessarily something that A did on purpose, and instead is able to entertain the possibility that it is the result of a defective context, they might see fit to simply clarify their question as follows:

Turn 1	X: How would you like your tea?
Turn 2	A: In a cup.
Turn 3	X: I meant what *additions* would you like *in the tea*?

This route may well result in no negative repercussions whatsoever. So, it is clearly preferable to the others. And given this stark contrast, it may be initially hard to see why it is not already the default strategy in instances of miscommunication such as this one. Why would anyone opt for a conversational move that is more likely to do unwarranted harm to their interlocutor? While the more harmful routes are, of course, not *always* the ones taken, it is nevertheless all too common that they are chosen over the more benign option. This is, in part, due to the fact that making assumptions about others is incredibly efficient.

In much of pragmatic theory, it is taken for granted that efficiency in communication is to be valued above all else. When we are presented with an utterance to be processed, we will by default operate on the assumption that the utterance's content is worth our while to process—e.g., that we gain enough information from it (Sperber and Wilson 1986). The more information one can acquire for less cognitive effort, the better. It is not difficult to see why this kind of process would be attractive, nor to imagine why we have continued to communicate according to it.[25] However, there seems also to be a lot of potential for things to go wrong if we are too quick to form judgments about an utterance's informativity.

In order to maintain an assumption of informativity, a great many other assumptions must also be operating in the cognitive background. And this is, of course, not a bad thing. Speakers rely on assumptions in their exchanges all the time. If there weren't certain things that we could take for granted about our interlocutors—that they speak English, that they are cooperative, etc.—we would never get anything done. To communicate with anything even resembling efficiency, we need to be able to establish a starting point for what other speakers can be expected to know so that we might craft our utterances accordingly. How exactly this starting point is crafted, though, is far from clear. A lot of the content for this baseline context will come from inductive inferences we make about our interlocutors based on, say, cultural communities we presume them to belong to, or common experiences we presume them to share with us (Clark 1996). But even before these kinds of addressee-specific assumptions, there seems to be some more basic ones that speakers rely on just in virtue of their addressee being in some basic way *like them*. If this basic assumption is too robust, though, it risks unreasonably excluding interlocutors who are different from you in ways that may not be immediately obvious—e.g., of a different neurotype.

There are certain things that you probably assume any given person you talk to will know; these are facts that you might consider to be matters of common sense in that you just tend to assume that everybody knows them. Such assumptions are incredibly useful in the reasoning you employ to process the utterances of others and in the crafting of your own utterances.

The more information that you can correctly assume to be mutual between you and an interlocutor, the more efficient your exchange is likely to be. But relying on assumptions of shared belief too dogmatically can cause problems in conversation if what seems like common sense to you is not judged as such by others. In aiming at communicative efficiency, it is easy to become unreflective about the knowledge we take for granted as being common.

This is what happens when X reasons that A is being non-literal in Tea Exchange; X takes for granted that A knows that *tea is always served in a cup* as a matter of common sense, and so infers that their intentions must be something besides being informative. They do not stop to question what grounds this reasoning, and in failing to do so they are led astray from A's actual intentions. My aim here is to challenge the role that such automatic assumptions play in our everyday reasoning. While they are useful, they are also defeasible, and this defeasibility is something that tends to get overlooked in the interest of efficiency. If you are willing and able to stray a bit from this interest of efficiency, opting instead to ensure your meaning is clear, you may be able to avoid the needless cruelty that can come from misunderstandings.

1.5 Uncommon Sense

If the case entertained thus far strikes you as unintuitive, I implore you to consider a slight variation on this example.

1.5.1 Tea Exchange

Suppose that X is British, and A is American.

Tea Exchange (UK)

X: I'm making tea; what can I get you?
A: English breakfast.

I take the following to be plausible parameters of the question "what can I get you?" that X might be looking to resolve here:

1 {milk, sugar, milk and sugar, neither milk nor sugar}
2 {English breakfast, earl grey, chamomile, green, chai}
3 {tea, coffee, water}

Starting with (3), let's suppose that X's initial remark of "I'm making tea" at least narrows the focus of the question "what can I get you?" to the realm of beverages. If that initial remark can also be taken to establish a presupposition something like *X will get A tea*, then the parameter in (3) can be ruled out as already resolved. And if, additionally, A understands "tea" as shorthand for English Breakfast tea—as I am told is common in the UK—then the parameter addressed by (2) can be ruled out as well. So far, this case should strike you as much the same as the original Tea Exchange.[26] Where the cases diverge is in consideration of what warrants the assumed mutuality of the background information used to rule out (2). In the original Tea Exchange, that warrant came from common sense; the fact that tea is always served in a cup was just supposed to be something that everybody knows. With regard to Tea Exchange (UK), however, it is not clear that this same source of justification will hold up.

Based on their cultural backgrounds, X will be familiar with "tea" being shorthand for English breakfast tea, but A will not. To X, the assumption may seem like a matter of common sense; they may or may not be aware that this commonality is merely regional, depending on how much exposure they've had to speakers who do not share it. If X is not particularly aware of and sensitive to the limitations on this assumption's commonality—or perhaps merely unreflective in the moment regarding such limitations—they might well find A's response of "English Breakfast" to be rather strange. If X is already assuming that the tea served would be English breakfast tea and had assumed that A already knew this as well, A's response will likely prompt some confusion.

Following the previous analysis, we can imagine that X's reasoning about the response might follow one of two paths. The first would, as before, result in their thinking that A's response was intentionally redundant; A was trying to be funny by stating the obvious, and various consequences may follow from this line of thinking. Alternatively, X might recognize the response as indicating a defect in the context and be prompted to attempt to repair it. They might follow up with something like:

X: I meant what can I get you to go *with* your English breakfast tea?

In this version it seems like repair is the most natural route to take. But what makes this the case here and not for the original Tea Exchange? The answer, I think, will lie in how implicitly committed X is to the background assumption that their processing of A's utterance relies on. In the original case, the assumption (and assumed mutuality) of *tea is always served in a cup* is treated as a matter of common sense, and so X is unlikely to even consider abandoning it in their processing. In Tea Exchange (UK), though, the assumption *"tea" is shorthand for English breakfast tea* is one that X is perhaps more willing to abandon, or at least more prepared to think is not shared by their audience. In fact, the apparent strangeness of A's response seems likely to make salient the cultural division between the two parties, reminding X that Americans drink other sorts of tea besides English breakfast. And while I imagine some explanation could be given regarding the nature of cultural common sense as opposed to general common sense, I am not aware of any account that reliably predicts such a distinction.

This is why I take it that repair ought to be the natural strategy in the original Tea Exchange as well. Insofar as it is not already the default—and I hope to have shown that it is not—this seems to be because speakers are more willing to misinterpret their interlocutors than they are to reflect upon their own implicit background assumptions. This tendency, as I explore in the next section, can be seen as an instantiation of intellectual arrogance.

1.5.2 Allistic Arrogance

X's inclination to misconstrue A's intentions here is grounded in an overreliance on what is assumed to be common sense. It is not just that the common-sensical assumptions are applied too broadly, but rather that X's confidence in the truth *and mutuality* of these assumptions is actually much stronger than is warranted. To see this, it will be helpful to consider where common sense presuppositions seem to come from in the first place. While there are many sources that such information *could* come from, my focus here will be on just one sort: inductive generalizations.

I take it that many propositions that get treated as common sense assumptions have their grounding in empirical evidence. We see things, recognize patterns, and on that basis come to form more complex beliefs about how the world works. In other words, we generalize. But this process is an inductive one, and as such the generalizations we draw from it will never be entirely certain. This does not mean that such generalizations are not valuable or that they are not essential to our practical lives. What it means is that they are defeasible; the patterns and regularities we recognize in the world may lead us to form generalized assumptions that may be incredibly probable, but just because we have yet to see a counter-example does not mean there is none.

Consider the common-sensical assumption in Tea Exchange: *tea is always served in a cup*. Let's say that you have seen tea served roughly 100 times in your life, and every time the serving vessel has been something you would readily classify as a cup. Perhaps the first ten times seeing this were enough for you to form the generalization *tea is always served in a cup*. The more times this regularity was confirmed, the more confident you became in that generalization (and its common-sensical nature). The tricky thing about this generalization, though, is that it is phrased in absolute terms when in fact all that the inductive process warrants is a probable formulation; your empirical evidence tells you that tea is *often*—or even *very often*—served in a cup, but it lacks the power to inform you about whether this is *always* the case. It can also tell you that *many* or even *most* people you meet will share this assumption, but it cannot support the claim that *all* do. Upon active and explicit reflection, this inconsistency is easy to recognize and admit. The problem is that we do not tend to actively reflect on our background assumptions unless they are explicitly challenged. In everyday life, the interest of efficiency leads us to be unreflective; it is easy to unreflectively treat admittedly defeasible generalizations as full-fledged knowledge.

Falling prey to this kind of ease and favoring it over careful and reflective attention to detail, while in some cases innocent and in fact incredibly useful, elsewhere can lead one into intellectual arrogance—i.e., a failure to recognize the limitations of one's own knowledge (Whitcomb et al. 2017). Forgetting that certain commonsensical assumptions are actually defeasible and relying on them in your reasoning as if they are not seems to be a clear instance of just such a failure. In taking for granted not just the truth but also the commonality of their assumption, X is engaging in intellectual arrogance.[27] In particular, they are failing to consider the possibility that A's experience of the world, and hence the set of background assumptions that they hold, might be different from their own. And while some differences of experience will be easy to recognize—e.g., because they can be inferred from someone's visible characteristics—others will be much less apparent; the more someone appears to be similar to you, the easier it is to assume that their lived experience is identical to yours. And since differences in neurotype are invisible, this means that cross-neurotype communication will be especially ripe for the exhibition of intellectual arrogance. This means that successful communication between allistic and autistic parties will tend to require a high degree of humility with regard to one's background assumptions, even if this means the conversation will not be maximally efficient.

Cross-neurotype communication difficulties have been well documented (see Crompton et al. 2020; Milton, Gurbuz, and López 2022). In part, I expect such difficulties can be explained by the fact that allistic speakers are more prone to arrogantly rely on inductive generalizations than autists are. Allistic people are inclined to rely heavily on cognitive processes that have proven "reliable", though not infallibly so, because such reliance tends

to aid in the maximization of communicative efficiency (Westra and Nagel 2021).[28] They are more likely to operate on the assumption that their perspective on the world is shared and that their experiences are universal, because the vast majority of their encounters with others seem to confirm that this is in fact the case. Maintaining such assumptions makes it natural for them to presume they know what others intend instead of wasting time asking for clarification. This is what happens when A is misinterpreted as being funny or rude.

In contrast, autists are more prone to rigid thinking (Cashin and Yorke 2016), making us less likely to form absolute generalizations on the basis of limited evidence.[29] We are not just less likely to rely on such generalizations, but may even be less likely to form them in the first place. It also seems that autists will be more likely to opt for conversational repair when it appears that a communication breakdown has occurred, despite its being inefficient, because we are more concerned with getting the meaning right than with maximizing efficiency.[30] This could be because we are all too familiar with the experience of being misinterpreted, and so we want to avoid perpetuating such a harm against others. It could also be due to our being more acutely aware—because we are surrounded by people who do not share many of our life experiences—that our assumptions may not be universal (Williams, Wharton, and Jagoe 2021).

These neurotype-related dispositions lead allistics and autists to tend toward different intellectual practices. In the interest of maximizing efficiency, allistic speakers tend to be more intellectually arrogant; they tend to assume their background assumptions are universal and so rely on them quite dogmatically and unreflectively. In the interest of minimizing miscommunication, autists tend more toward intellectual humility; we don't take as much for granted when we engage with others, because we are more aware about the limits of our background information. This mismatch of dispositions seems to be what makes cross-neurotype conversations so ripe for miscommunication. Because allistic speakers are more arrogant, they are quick to assume that they know what their interlocutor intends and deem requests for repair or clarification to be a waste of valuable time. An increase in intellectual humility here would call for less importance being placed on efficiency as a communicative virtue. The prioritization of efficiency, though, is deeply and evolutionarily ingrained (Heintz and Scott-Phillips 2023). To see further why it is worthwhile to loosen our collective grip on this conversational virtue, I conclude with a discussion of the harms that persistent misinterpretation can inflict on autistic speakers.

1.6 Response to Wrongdoing

I have mentioned already some of the potential harms done to autistic speakers when they are misunderstood. Misinterpretation is a harm in itself, but this harm is magnified when the intention attributed is a reprehensible one—e.g., one of being rude. I mentioned only briefly the notion of criticism in section 1.3, but it is at this point worth teasing apart criticism from its stronger counterpart: blame.

1.6.1 Conditions of Blameworthiness

When the autist is accused of rudeness, it is not obvious whether this accusation is meant as a mere criticism or further as a placement of blame on the individual. A mere criticism would be aimed only at the objectionable behavior itself—that A said something rude—but

an act of blaming would aim more pointedly at the agent responsible for this behavior (Simion 2021). The line between criticism and blame is often drawn with respect to all-things-considered judgments; blame can be avoided with an appropriate justification or excuse for one's actions, but criticism cannot. We might consider, then, the following as the conditions which must be met for blame to be apt. Blameworthiness will require that all three of these conditions be met, while liability to criticism will only require the first.[31]

1 Veracity Condition: an agent Y can be blamed for an action φ, when:
   a. Y did φ, and
   b. φ is morally objectionable
2 Freedom Condition: an agent Y can be blamed for an action φ only if Y's act of φ-ing was a free action (i.e., not taken under duress, or other exculpating condition).
3 Epistemic Condition: an agent Y can be blamed for an action φ only if:
   a. Y φ-ed with knowledge that they were φ-ing, and knowledge that φ-ing was morally objectionable, or
   b. At the time of φ-ing, Y was culpably ignorant of at least one of the facts in (a).

With this in mind, my suggestion is that in Tea Exchange A is neither blameworthy nor criticism-liable for their allegedly rude utterance of "In a cup". This is because I take it that Veracity Condition (b) is not met; A has done nothing wrong. Based on the mutual assumptions that were in fact operative in the conversational context—i.e., not just those that either interlocutor understood to be mutual, but only those which were in fact mutual—A's utterance was a felicitous one. The only reason that the utterance seemed infelicitous is that X was mistaken about which assumptions were mutual, and A cannot be faulted for this mistake. The offense that X takes at A's utterance is entirely manufactured by X themself; if X had not hastily jumped to conclusions about A's background assumptions, they would have realized that there was nothing to take offense at. The assessment that A did something wrong—even if blamelessly—comes from a place of intellectual arrogance where one is expected to follow conventions which one may never have been taught. And since, as far as I am aware, there exists no principled manner in which one is to learn which assumptions are conventionally taken to be common sense in a given domain, it hardly seems fair to expect A to hold any such assumptions apropos of nothing.

1.6.2 The "Autism Excuse"

While I hope my argument thus far has provided compelling evidence for the assessment that A has done nothing wrong, I would like to acknowledge—and ultimately dismiss—what I expect might seem like a plausible alternative to this assessment. If you are unconvinced that A's utterance should not be classified as rude behavior, I expect that you take the Veracity condition to be met in full. But given this, you might nevertheless be sympathetic to my depiction of A as autistic, and so be inclined to say that though their *behavior* was objectionable, they cannot be held fully responsible for it. That is, you think that A's utterance may be criticizable, but that they are not blameworthy for it.

I expect your reason for allowing this concession would be that you take A to fall short of meeting the Epistemic Condition. Though A knew what they were saying, they did not

know that saying it was objectionable. And to explain why they were ignorant of the fact that this behavior was objectionable, you might then claim that A's being autistic constitutes a non-culpable excuse for their ignorance. In engaging in such reasoning, you treat the autist in much the same way that you might treat a young child, or others typically classified as being mentally incapacitated; you take A's autism to be a factor which limits the extent to which they can be held morally responsible (see Strawson 2008). On this ground you would conclude that they are not blameworthy for the wrongdoing, and you would probably think that you are offering me a great boon in making this concession. Unfortunately, I do not see it this way.

I hold that A did nothing wrong, and not merely that they are not blameworthy for their wrongdoing, precisely *because* A is an agent capable of being blamed. If the autist had in fact done anything wrong, they would be an apt target for blame. This is because, of course, autists are capable of being rude; we are capable of doing wrong and ought to be held to account for it when we do (see Shields and Beversdorf, 2021). To treat us as if we are not is to strip us of our agency. Instead of carving out exceptions for autistic speakers and thus alienating us from the larger moral community, the moral landscape ought to be such that common autistic behaviors do not rise to salience as objectionable in the first place.[32]

And further, the suggestion that autists are subject to different moral standards than others is a strange one, given that someone's status as autistic or allistic is generally an invisible characteristic. If autists are held to different standards, it would seem that in order for my actions to be evaluated properly I would have a duty to disclose the fact that I am autistic in any given interaction I might find myself in. This, I hope, strikes you as an uncomfortable result. I do not owe anyone a disclosure of my neurotype in order to garner proper respect or understanding from them.[33] Rather, perhaps the fact that you often cannot know the neurotype of your interlocutor should give you reason to behave with more compassion and humility across the board, not just in those special cases where you carve out exceptions.

Based on this analysis, any accusations of rudeness made against an autist who was making their best efforts to be polite ought to be seen as misplaced and therefore empty of moral significance. This emptiness, though, can often be hard to discern from genuine moral censure. When the autist is accused of being rude, the difference between this accusation constituting a mere criticism and its constituting an act of blaming will be imperceptible. If X issues the accusation on the assumption that A is not an appropriate target for blame, their intention may be to merely criticize. And merely criticizing one's behavior is not usually thought to do any harm to one (Simion 2021). But how is A to discern whether the act is one of criticizing or blaming? Presumably, A takes themself to be a full moral agent; they understand themself to be capable of doing wrong, just like anyone else, and know that they are an apt target for blame.[34] Of course, this does not mean that they want to be blamed. But when someone calls attention to the fact that they have behaved badly, the autist will probably come to see themself as blameworthy for having done so. And on this ground, despite the fact that X might intend only to criticize, this criticism will be interpreted as blame. In a sense, even if X is not blaming A, A is blaming themself.

The central issue here is that autistic speakers are disproportionately likely to have their communicative intentions misinterpreted. The matter of blame only serves to draw out the potential consequences of this. It is harmful to be misunderstood in the first place, but that harm is further crystallized when the misunderstanding translates into the moral realm. Being blamed when one is not actually blameworthy is harmful, even if it's just a one-off

occurrence (McKenna 2013). It's especially harmful, though, when it happens time and time again.[35] When one is constantly the target of this sort of undeserved blame, as the autist tends to be, it becomes difficult to recognize the blame as undeserved. The regularity of this blame can make one think that one might in fact be blameworthy after all. To be put in this position, I hold, constitutes a serious harm toward autistic speakers. We are told so frequently that we are weird or rude that we start to believe it. And though these accusations may in actual fact be empty, it is hard to maintain that this is the case when they seem to permeate every aspect of our lives.

1.7 Conclusion

To be clear, my claim has at no point been that employing assumptions in discourse interpretation is bad, or that you shouldn't do it. My suggestion is rather that it is worth keeping in mind that your background assumptions, even if they are seemingly a matter of "common sense", are defeasible, and that your experiences may not be as universal as you like to think they are. When you exhibit intellectual arrogance by implicitly treating your *prima facie* assumptions about others and what they can be expected to know as full-fledged knowledge, you risk making egocentric errors with harmful consequences in your interactions with others. And while it may fly in the face of communicative efficiency, you ought to consider that your idea of common sense may not be so common after all before jumping to conclusions about what others are up to.

Notes

1 See e.g., Baggs (2007), Fischer (2012, 150), Vivian (2012, 250), Sequenzia (2012, 350), Price (2022, 70, 154, 193–94), Silberman (2015, 106), Yergeau (2017, 143).
2 See e.g., Herren (2012, 137), Harp (2012, 306), Price (2022, 51, 91).
3 See e.g., Vivian (2012, 186), Prahlad (2017, 56), Price (2022, 3, 44, 196), Silberman (2015, 352).
4 In focusing on just autistic *speakers*, it should be noted that the scope of this claim will be limited to members of the autistic community with relatively low support needs—i.e., those autists who are also speakers, and who tend to blend into broader society.
5 Keep in mind that this is only meant as a toy example for illustrative purposes. The phenomenon I characterize here is more commonly seen in much more complex and nuanced conversational contexts.
6 Some brief notes on terminology: I opt for the term "allistic" as opposed to "neurotypical" in the interest of avoiding slippage into overgeneralization; my focus is on just the division between autistic and non-autistic speakers, and I do not intend to address other varieties of neurodivergence. Additionally, while some authors—e.g., Price (2022, 44)—may choose to capitalize the term "autistic" and variants thereof, evoking notions like the capitalization of "Deaf" to indicate membership in a cultural community, I have decided against this; when I refer to "autists" I mean to encompass the group of individuals who exhibit the associated traits of autism, regardless of their official diagnostic status, self-awareness of such traits, or community membership.
7 This is not meant to be an exhaustive list of the available parameters, just the three most plausible.
8 Complete answers will only be called for in very specific contexts. For instance, when ordering a drink at a café you would be expected to specify all these parameters and more—e.g., large, iced, with milk, in a to-go cup.
9 Or previous utterances in the discourse, but this obviously does not apply here.
10 This assumption of sincerity is, importantly, merely a stipulation. Autistic speakers are, of course, capable of employing other sorts of communicative intentions besides sincerity, that just doesn't happen to be the case here.
11 Or perhaps slightly weaker: *tea is served hot unless otherwise specified*.

12 I leave out a case where (1) is ruled out, because it seems less plausible that a specification of additions that go in one's tea would be assumed as a matter of course.
13 Both (1) and (2) are left open, but one or the other may seem more salient to A for any number of reasons. There may be factors which dictate that one is more appropriate to address than the other, but—as far as A can see—either is fair game.
14 This might be an educated guess, made of the basis of which parameter seems the most salient to A. The reasons for (2) seeming more salient than (1) need not be transparent, but we might imagine that, for instance, A has sensory sensitivities that dictate a strong preference for cups, as opposed to bowls, mugs, or glasses. Such a preference may be strong enough to make it the case that the vessel tea is served in actually matters more to A than what additions go in it.
15 See e.g., Price (2022, 65).
16 Imagine, for instance, that A wants to craft a reputation of seriousness among a new peer group and the misattribution of humor thwarts this plan.
17 This problem comes through more plainly where the autist's utterance is a question. For instance, if A asked, "will the tea be served in a cup?" hoping to gain information, but X thinks that this is a rhetorical question, and so merely laughs in response instead of answering A's question.
18 I return to this distinction, and why I focus on the latter sort of response, in section 1.5.
19 That is, people who are not your parent are probably less likely to respond to apparent rudeness with the benevolent intention of teaching you something. Perhaps this is because it is not generally seen as polite to behave as if one knows better than others when it comes to social norms (see Brown and Levinson, 1987). Though, this regularity may well admit counterexamples—e.g., when "knowing better" is plainly a matter of cultural difference rather than a matter of intelligence.
20 While I admit that there may be *some* possible ways of constructing a question which avoids the pitfalls of those addressed—and that I am only able to address a small number of candidates here—I also think that, if such a construction does exist, the amount of complex forethought required to find it will simply be more than we can reasonably expect a speaker to engage in during a real-time conversation.
21 A similar explanation could be applied if we considered the clarification question as including just one or the other disjunct—"Did you mean what kind of a vessel I'd like it in?" or "Did you mean what additions I'd like with it?". The former would read as rhetorical because it seems obvious the answer is no, and the latter because it seems obvious the answer is yes.
22 I admit this is where Tea Exchange as a toy example may have outlived its usefulness. The inclination to take clarification questions as condescending seems much more prevalent in, for instance, cases of insinuation. There, asking an insinuating speaker "What do you mean by that?" may be taken as a challenge, since—on the assumption that their insinuated meaning is obvious, and so the clarification question is not asked genuinely—it calls the insinuating speaker's bluff, forcing them to either deny the insinuated content, or go on-record with it (see Camp 2018).
23 You might think that knowledge of A's being autistic could count as such a reason. I address this possibility in section 1.5.
24 In other words, they have an unconscious tendency to maintain their interlocutor's positive face (see Goffman 1959).
25 In fact, the evolutionary stability of this practice has been detailed by, among others, Rubio-Fernandez (2024).
26 Again, leave out the case where (1) is ruled out for the reasons mentioned before.
27 We might also understand X's assumption that their own beliefs are mutual here as an instantiation of the double empathy problem. In supposing that A holds the same background assumptions that they themselves hold, X could be described as failing to adequately mindread (see Milton, Gurbuz, and López 2022).
28 This claim is not made about allistic people *explicitly*, of course, but I take it that the target phenomenon of work on human cognition is *allistic* human cognition unless otherwise specified.
29 In some cases, this might mean a preference for relying on probabilistic claims rather than absolute generalizations, in others it may be that the autist does not group prior experiences together on the basis of apparent similarity in the same way that allistics do.
30 Note that this disposition seems only present in autists who are to a certain degree self-aware; it may not apply to undiagnosed autists, autists who are not aware that they are autistic.
31 Conditions extracted and paraphrased from McKenna (2013) and Simion (2021).

32 I acknowledge that this is a much larger claim than can be fully addressed here, but it is one that I hope to defend in future work.
33 A duty for disclosure would also be problematic insofar as not everyone who exhibits autistic traits is aware that they are autistic, so those who are undiagnosed would have nothing to disclose and thus be inadvertently subject to the wrong standards of assessment.
34 Autists are frequently told, after all, to stop using our autism as an "excuse" for acting badly. See Sarrett (2016).
35 See Fricker (2007) for another example of this sort of identity-targeted injustice which builds up over the course of one's life.

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2

MORAL RESPONSIBILITY AND AUTISM

Ann Whittle

2.1 Introduction

In the literature on moral responsibility, little attention has been given to the autistic community. Of that which has, some rather startling claims have been made. Shoemaker, for example, claims that "those with high-functioning autism are not accountable" (2015, 172), such individuals are thus put at the "margins" of moral responsibility. Similarly, Stout suggests that autistic individuals are "not responsible agents" (2016, 1016), consequently, they are "closed off from the rest of the moral community in important ways" (2016, 1026). These claims deserve serious consideration, especially given their practical import. Attributing moral responsibility to agents who are not morally responsible could be harmful, potentially making them liable to reactive attitudes, such as indignation, and sanctions that are undeserved.[1] Equally, however, denying autistic people the status of morally responsible agency threatens both to infantilize the autistic community and to present autistic people as something "other"—individuals who fall beyond the bounds of (and thus possibly the protections of) the moral community.

This chapter offers a contribution to this debate. After a brief introduction to the philosophical debate surrounding moral responsibility, I argue against Shoemaker's claim that autistic people are not accountable for their actions by examining the empirical evidence on which Shoemaker bases his conclusion. I then suggest that apparent deficits in empathy can, at least in part, be explained by differences in emotional expression. What we often see is not an absence of empathy, but rather a "double empathy problem" (Milton 2012), where there is a breakdown in understanding between autistic and non-autistic people because of their different experiences of being in the world. After this, I further strengthen the position by arguing that, even if the empathic abilities of some autistic people (as compared to non-autistic people) are lacking, Shoemaker's argument that empathy is required for moral accountability, and thus excludes such people, is implausible. For a better account of moral responsibility, we should look instead to reasons-responsive accounts.

In the final section of the chapter, I consider Stout's claim that autism poses a problem for reasons-responsive theories of moral responsibility. I argue that, on the contrary, this

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approach nicely captures plausible judgments concerning when autistic people should be thought of as morally responsible for their acts and omissions. Given the dynamic nature of this disability, I argue that it is imperative that each attribution of moral responsibility is assessed on a case-by-case basis. But this makes no difference in kind from our standard practices of attributing moral responsibility.

2.2 Moral Responsibility

Imagine that I am minding my own business when, suddenly, someone knocks into me, causing me to trip. I hurt my head and break the valuable vase that I was holding. My instant reaction is one of anger and reproach, but when I have regained my equilibrium, I wonder whether the person who knocked into me was morally responsible for the harm they caused me. Note that being morally responsible is not equivalent to being causally responsible for the harm, since it is a given that they have caused the harm. The question of interest is rather whether, on the basis of their behavior, some moral discredit can justifiably be directed at them. For conciseness's sake, let's just call this discredit blame. Can they, other things being equal, be fairly blamed for the harm they caused?

Suppose, to extend the example further, that the person in question was a hyperactive, seven-year-old. We might say, following Wallace (1994), that this person is exempt from moral responsibility since they haven't yet developed the necessary capacities to be held morally responsible for their action. Alternatively, imagine that the person was a competent adult, who was themselves knocked into and then they toppled into me. Although they have the necessary capacities to be held responsible, it seems that they are not morally responsible for the harm done to me, as they have an excuse which exonerates them.[2] But this raises the question: why are these, and other exemptions and excuses, generally accepted in our moral practices? What is required to be morally responsible for some act or omission? When can a person be excused or exempted from moral responsibility?

Philosophers have long grappled with these questions and offered analyses which attempt to elucidate and explain when and why agents can be held morally responsible. Very broadly speaking, in the current debate, two main approaches have emerged. Following Aristotle's classic discussion, control-based theories of moral responsibility argue that for agents to be morally responsible for their actions or omissions, the agent must have some level of control over their behavior.[3] The reason, for example, that the person who knocked into me is excused, is because their behavior was not an exercise of their control—it was just an accident. Similarly with the child. Although we can suppose that they had some level of control over their actions, they were too immature to count as morally responsible for the harm caused, because they lacked the capacities necessary to meet the required threshold of control.

Attributionist theories, in contrast, argue that for an agent to be morally responsible for their act or omission, it is not necessary for that agent to be in control. Instead, their behavior must rather express the agent's evaluative commitments or quality of will.[4] The person who knocked into me by accident, for example, bore me no ill will. Their behavior was not an expression of their reasoned commitments. The case of the child is a little more difficult to accommodate, but we can say that although their action may have displayed some ill will toward me, as they lacked the capacity to truly appreciate other people's points of view (see Shoemaker 2015), their actions did not display the same necessary level of ill will as those of a competent adult.

We might wonder whether these two approaches really are so distinct, as it seems questionable whether an agent's behavior would be an adequate reflection of their evaluative commitments if the agent in question were not, in some sense, in control of it. But this is an issue for another time; here all we need to stress is the practical import of our theories of moral responsibility. Depending upon the theories, not only individuals, but whole classes of people may be exempt (or, less positively, excluded) from the realm of morally responsible agents. For example, Shoemaker's (2015) top-down approach (from theory to practice) argues, on the basis of his attributionist theory of moral responsibility, that autistic people are not responsible in the sense that grounds blame.

Some philosophers, however, instead take a bottom-up approach, arguing from our practices of holding people morally responsible to a view regarding what a theory of moral responsibility should look like. So, given the plausibility or implausibility of holding certain people morally responsible, it is argued that a theory which deems otherwise must either be rejected or amended. This is the strategy that Stout (2016) takes, arguing that Fischer and Ravizza's (1998) control-based theory of moral responsibility should be rejected, as it renders some autistic agents responsible who plausibly are not responsible. It is these two specific claims about moral responsibility, made by Shoemaker and Stout, which will be examined in this chapter.

2.3 Shoemaker's Argument

In "Responsibility from the Margins" (2015), Shoemaker proposes a line of argument that precludes autistic agents from moral responsibility in the accountability sense (see 2015, 166–72). It can be briefly stated as follows:

1 Empathy is required for moral responsibility (understood as accountability).
2 Autistic agents lack empathy.
3 Therefore, autistic agents are not morally responsible.

My aim is to cast doubt on this argument, by arguing against the first premise in 2.5, and the second premise in 2.4. But, first, a little more should be said about the key concepts the argument employs.

Let's begin, then, by saying what, according to Shoemaker, responsibility in the accountability sense is. Shoemaker argues that we should posit three distinct notions of moral responsibility. The first, attributability, requires that the agent's action be an expression of their quality of character, where having a character means that the agent has care-commitments. This notion of responsibility, if it is properly so-called, is very undemanding as it does not even presuppose "normative competence" (2015, 61) on behalf of the agent. On the basis of attributability responses, Shoemaker argues that we may appropriately feel admiration or disdain for the agent, but we are not entitled to hold them to account for their actions. So reactive attitudes such as resentment, indignation, etc. and sanctions are excluded.

Similarly Shoemaker states, of the second form of moral responsibility, that "blaming emotions of resentment and indignation … are not fitting for moral answerability" (2015, 78). To be answerable for an action, it must reflect the agent's evaluative judgments, so we can call on them to defend their action by citing their reasons for performing it. But this

will strike many as a precondition of moral responsibility, rather than full-bloodied responsibility, since arguably a robot or brainwashed agent would be able to explain their reasons for action, and we may criticize them on those grounds, but still it seems that they are not morally responsible for their actions.

It is the third, accountability sense then, which most philosophers, and I suspect ordinary folk, tend to mean when they say that someone is morally responsible for their action. This accountability sense does license holding the perceived wrongdoer to account. It is fitting, Shoemaker writes, to make "the slighter fully aware of what he has done…to acknowledge, the emotional havoc (and worse) that he has wreaked" (2015, 107). Moreover, if it is ever appropriate to use sanctions against someone then, according to Shoemaker, the agent must be accountable for their actions.

It is this full-bloodied, accountability sense of responsibility which, Shoemaker argues, "those with high-functioning autism…are exempt or seriously mitigated from" (2015, 108). What is meant here by "high-functioning autism"? Following standard usage, by "autistic" I mean anyone who does or would meet the criteria specified by the fifth edition of the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2013, 50–8). I say this reluctantly, as the criteria specify the autistic way of being in the world as a deficit rather than a difference. So, roughly, autism is defined in terms of deficits in social communication and interaction, restricted patterns of behavior, interests or activities, and sensory difficulties. In addition, these difficulties must be present from early development, cause the person significant difficulties in their everyday functioning, and not be better explained by intellectual disability. "High-functioning autism" generally refers to autistic people who both use language and have a normal or above average IQ, so they have no co-occurring intellectual disabilities.[5] I, like Shoemaker and most of the other authors cited here, will restrict attention to this cohort, unless otherwise stated. Given the definition of autism in terms of behaviors, it is controversial whether the classification latches onto a kind stable enough to warrant projections and generalizations. This substantial issue can be set aside here, however, since the argument states that the generalization, "If S is autistic, then S lacks empathy" is true. Consequently, the argument assumes that autism is a kind stable enough to warrant such generalizations.

What is meant here by empathy? This term is used in different ways in the psychological and philosophical literatures. Often, however, a distinction is made between cognitive and affective empathy. Cognitive empathy refers to an agent's ability to understand the mental states of others, their intentions, beliefs, emotions, desires, etc. More narrowly, it refers to an agent's ability to simulate the mental states of others by putting themselves in their shoes, thus predicting what they might be feeling and how they might behave. More generally, it is allowed that the person empathizing need not actually simulate the other's mental states. It is enough that they theorize about what the agent might feel and do, given their folk psychological theory of how mental states and behavior are correlated.

Affective empathy requires more than just understanding the perspectives of others. In addition, it requires that an agent come to have an affective state because of their awareness of how another person is feeling. To distinguish empathy from sympathy, it is important that this affective state is not just any feeling. Although some in the psychological literature allow that a feeling of concern or compassion for another's distress suffices for empathy (see, for example, Batson et al. 1991), most have wanted to insist that there must be some

"matching" of affective states for empathy. Just how close this matching must be, however, is a moot question. We must allow that the affective states can have different intentional contents. For example, although I might emphasize with Jen over her jealousy of Jo, because I am not jealous of Jo, Jo will not be the intentional object of my emotion. But given I have felt jealousy myself, I can recall this feeling and so experience a state similar to, and more in keeping with the position of, my friend. Without any experience of "what it is like" to feel something akin to that affect, however, the "matching" state might just amount to something very indeterminate—"feels good versus feels bad" (Smith 2017, 715). Consequently, it seems plausible to talk about empathizing more or less with a person, depending upon how closely their affective states match ours.

What kind of empathy does Shoemaker think is necessary for accountability responsibility? Shoemaker states that it is more than cognitive or "detached" empathy. He defines accountability responsibility as,

> one is an accountable agent just in case one is liable for being a fitting target of a subset of responsibility responses to one—a subset organized around the paradigm sentimental syndrome pair of agential anger/gratitude—in virtue of one's quality of regard. To have quality of regard an agent must be capable of either a) coming to see facts about others (or the agent's own) normative perspectives as putative reasons in the agents own normative deliberations, as a function of evaluational empathy, or b) coming to feel what others feel in a simpatico fashion, as a function of emotional empathy. An agent is accountable for some specific attitude or action just in case it accurately displays either or both of these features of the agent's quality of regard.
>
> (2015, 113)

According to Shoemaker then, to be accountable, we need either emotional empathy, which is his term for affective empathy, or "evaluational empathy". This is similar to affective empathy, but with a particular emphasis on sharing in another person's commitments and cares. He writes, "In evaluational empathy, I actually see what the world looks like from her eyes with her set of commitments … I adopt her perspective on her own projects… with the worthiness-for-pursuit built in" (2015, 158–9). With these clarifications in place, I shall now turn to the second premise of the argument.

2.4 Autism and Empathy

The claim that autistic people lack empathy is a common one, both in the research literature and in common portrayals of this condition. Frith, for example, writes,

> The most general description of social impairment in autism is lack of empathy. Autistic people are noted for their indifference to other people's distress, their inability to offer comfort, even to receive comfort themselves.
>
> (1989, 144)

Lacking in empathy is not part of the definitional criteria for being autistic, however. Struggling with social communications and interactions is not equivalent to lacking either cognitive or affective empathy. So what is the evidence for this generalization?

2.4.1 Psychological Studies

Shoemaker's support for premise 2) draws almost exclusively on the work of Hobson (2006, 2011), a developmental psychopathologist, who studies the relation between typical and atypical development in children. The children discussed are often very young, sometimes with intellectual disabilities, in other words, a very different cohort from the one which concerns Shoemaker, namely autistic adults with average or above IQs. It is worth stressing this point, because there is the worry that researchers move from a claim about autistic children to a more general claim about autistic adults. This is evident in Hobson's own work (see, for example, 2011, 585). But it clearly does not follow that, just because a child has not developed empathy yet, they never will, even if other children of a similar age already have.

Hobson offers support for his claim that autistic children manifest a "relative lack of empathy and guilt" (2006, 153), but if we look at the detail, we see how underwhelming that case is. Hobson's studies do not examine empathy directly, but rather pride, guilt, and embarrassment. These, Shoemaker says, are necessary for accountability since agents need to be capable of "demand acknowledgement" from those whom they have mistreated (2015, 171). Shoemaker argues that autistic people are not accountable since "those with high functioning autism tend to experience neither guilt or pride" (2015, 171, where he cites Hobson et al. 2006). When we turn to Hobson's studies of older children, however (aged 11–19, with mental ages ranging from 4.5–15), we find that 3 of the 12 children without autism, and 4 out of the 12 children with autism "correctly provided accounts of guilt which included negative feelings, upset and responsibility as a result of something" (2006, 81). Moreover, when two judges, who were unaware of the children's diagnoses, were asked to comment on the depth and understanding of these emotions, no significant differences were noted (2006, 86). Thus, Hobson et al. are forced to conclude that,

> the results of this study appear relatively clear: contrary to our predictions, there were no significant group differences in the ability to identify the social emotions of pride and guilt portrayed by actors in video-taped scenarios, nor in participants' ability to report on their own experiences of these feelings.
>
> (2006, 88)

Similarly, when Hobson (2006, 61–2) turns to parental reports, we find a very different picture from one we would expect given a cohort of children who lacked empathy. Parents write, of their autistic children,

> He's very keen at picking up other people's moods I think. If someone's upset he gets very upset.
>
> I know that when I am distressed, because I am distressed, I get impatient and he reacts in the same way. He knows when I am distressed. He gets distressed as well.
>
> Oh yes, very very sensitive to people's moods. And even if it's something that's quite underlying with you, in that you're trying to cover up, she'll pick it up and she'll start reacting to that, rather than the superficial way that you're behaving.

The parents, then, report their children displaying a high degree of affective matching. It might be objected that what the parents are observing here is mere "emotional contagion".

The children's feelings are being caused by the emotions of other people, but they are not empathizing *because* they perceive or imagine that the person feels that emotion. For this to take place, in addition, they would need to have cognitive empathy. They would need to understand what it is like from that person's perspective. It is this, it has been argued, that autistic people lack. So we might suggest that autistic people cannot have affective empathy as this requires cognitive empathy.

Although there is a long, respected tradition of explaining autism in terms of deficits in theory of mind (see, for example, Baron-Cohen 1995), there is clear evidence that, at least when restricted to the cohort Shoemaker is interested in, autistic adults can make inferences regarding other people's thoughts and feelings. In Rasga et al.'s study (2017), for example, which assessed children aged 6, 8, and 10 years in scenarios designed to test false belief and counterfactual inferences involving other people's intentions, they concluded that,

> Children with autism made fewer correct inferences than typically developing children at 8 years, but by 10 years there was no difference…children with high functioning autism and Asperger syndrome do not lack the ability to make false belief and counterfactual inferences about other people's intentions, nor do they perform qualitatively differently from typically developing children.
>
> (2017, 1813)

Again we see, then, that we mustn't move from the fact that autistic children may be slower to gain these abilities to the conclusion that autistic adults lack them.

Indeed, if we just consider autistic adults, there are a number of studies which suggest that counterfactual inferences involving other agents' mental states are undiminished, or even better than those of non-autistic adults. In one such study, Black et al. (2019) presented participants, both autistic and non-autistic, with numerous counterfactual narratives. In half of these narratives, the person's emotions were to be expected given their beliefs, desires, and experiences, and in the other half, there were anomalies between the descriptions and what one would expect the person to be feeling. Here is one example of the inconsistent kind of story,

> Jenny likes to collect designer shoes and is always on the lookout for a bargain. There is a 50% off sale in her favorite shoe store today. She can either visit the store first thing in the morning before work or wait until her lunch break. Jenny decides to wait until her lunch break when she will have more time. When Jenny gets to the shoe store at lunchtime, she learns that they have sold the last pair of shoes in her size an hour earlier. Jenny could not take advantage of the 50% off sale today because she visited the store on her lunch break. Because Jenny chose to go to the shoe store in her lunch break, instead of first thing in the morning, she feels happy about her decision.
>
> (2019, 426)

By tracking the eye movements of the participants for anomaly responses (longer reading times and increased regressions compared with consistent words), the study showed that autistic participants were sensitive to the anomalies. Indeed, they concluded that, "Results showed that adults with ASD are unimpaired in processing emotions based on counterfactual reasoning, and in fact showed earlier sensitivity to inconsistencies within relief contexts compared to

TD participants" (2019, 422).[6] So the autistic participants did not struggle to recognize that Jenny, or someone like her, would most likely have been unhappy in this scenario.

Now it should be noted that the empirical evidence is far from unified on this question. There are certainly studies which indicate that autistic people are not as successful at cognitive empathy as non-autistic people. For example, on the Empathy Quotient, Baron-Cohen et al.'s self-report questionnaire (2004), autistic people scored significantly lower on measures for empathy.[7] But, contrary to the eye-tracking studies, there is a worry here. Because autistic people get told that they are bad at understanding other people's perspectives, this might affect how they come to view themselves (the looping effect). It does not show, as Baron-Cohen is well aware, that autistic people are actually less empathetic. Studies indicate that we often misjudge what others are feeling. Strangers infer others' thoughts and feelings with an accuracy of no higher than 20% (see Ickes 2001). Perhaps, then, autistic people are just more sensitive to their limitations?

In summary, given current psychological research, there seems to be no evidence to support the claim that autistic people lack affective empathy. There is some evidence which suggests that autistic people struggle more than non-autistic people understanding other people's perspectives. For example, Rogers et al. (2007, 709) report that,

> while the AS [autistic] group scored lower on the measures of cognitive empathy and theory of mind, they were no different from controls on one affective empathy scale of the IRI (empathic concern), and scored higher than controls on the other (personal distress).

When interpreting such data, however, we need to be sensitive to the fact that there may be other plausible explanations available. For example, some of the studies involve children, and so might be due to a protracted period of development. Others involve self-report, and so may be vulnerable to reporting biases and looping effects. In the next section, I shall motivate another alternative explanation, which calls into question the claim that autistic agents have cognitive empathy deficits.

2.4.2 The Problem of Double Empathy

A frequent observation made in the literature written by autistic people is how often non-autistic people misunderstand their perspectives due to their differing expressions. For example, here are two reports from autistic adults regarding empathy,

> At times I have empathy…and I also have a sense of feeling too much. Yet, I have frequently been accused of being insensitive. I always feel inside as if I care deeply about others, but this is not always perceived or understood.
>
> (Simone 2010, 152)

> Feelings can be overpowering for me, too, being an empathetic person. And I really hate picking up other's feelings, because they become my own. So I can't block them out even if I try…if they are happy, I can feel it, too. I can also feel anger and sadness easily, even other people's pain…I do care a lot but can't always say it. It doesn't always hit me right in the moment, but sometimes much later.
>
> (Wangelin et al. 2017, 64)

Both adults reflect upon the fact that their expression of empathy is not "always perceived or understood", that they "can't always say it", in other words, express their concern in a way which will be recognized as empathy by others.

Self-reports from autistic people often attest to differing emotional and behavioral expressions to non-autistic people. Here is a particularly worrying example from Amy, an autistic woman who doesn't speak, and as a child was considered "retarded",

> Once, with second-degree burns on my arm, and in a lot of pain, someone looked at me and, seeing no expression of pain, said that I "did not feel pain." I do, but my face does not show the intensity of the pain, or my reactions might not be what neurotypical people expect.
>
> (Sequenzia et al. 2017, 161)

This example is not unusual. When reporting on health-care deficits for autistic people (Shaw et al. 2023), a common problem mentioned was that "They don't believe my pain because I express it in words and my face and body language obviously 'don't match' to them" (2003, 5).

Reflections on these differences have led some researchers to postulate a "double-empathy problem" (see Milton 2012). This states that just as autistic people have trouble understanding non-autistic people, so too do non-autistic people have trouble understanding autistic people. We should reject the mistaken conception of empathy as an intrinsic ability which is had in isolation from other agents, and which one can be thought of as good or bad at independent of other agents, and see empathy instead as an interactional process between the various parties involved. The "deficits" in empathy which are often associated with autism, should be viewed as a breakdown in this interactional process—that autistic people have no greater difficulty understanding non-autistic people than non-autistic people have understanding autistic people.

To illustrate the problem of double empathy, consider this example. My daughter Ivy, diagnosed as autistic, experienced many difficulties when joining the social environment of school.[8] By the time she was 6, however, she had managed to find some friends. Unfortunately, one day I became aware that she had been completely excluded from the other children's play. Another mother kindly informed me that this was because Ivy never went to help when another child got upset or hurt themselves. She just left, and the other children deemed this unacceptable behavior. I talked to Ivy about the situation. She said that when she was upset, she hated being around other people and wanted to be left alone. So that is what she did for the person who was upset. As her mother, I could attest that this was true. She didn't find hugs comforting, but rather went "stiff", she didn't want to talk, she didn't want you to show her "concern". I then explained to her that other people do find these things comforting, and so she should try to say something like, "Are you ok?". Of course, this did not solve her difficulties. Her attempts seemed forced to the other children; she was still excluded.

I relate this experience as I think it nicely illustrates a few points. First, Ivy did pick up when other children were upset and hurt, and so she did manifest some cognitive empathy. Second, she did show moral concern for the person hurt, as she wanted to do what she thought was best for them, even though she got that wrong. Third, her failures were due to differences in how she reacted to being hurt, differences which she projected onto other people. But the same move was made by non-autistic people, as they would try to offer her

hugs etc. when she was hurt. So Ivy's deficits in empathy were no more than others' deficits in empathy toward her, but, for Ivy, they lead to painful social consequences.

In addition to reports from autistic people, we can also point to the fact that the problem of double empathy is theoretically plausible. Mental simulation is only going to be successful if the one who is simulating the target is relatively similar to their target. Or, if we understand another's perspective by employing an implicit folk psychological theory of other minds, our understanding will depend upon the extent to which our theory accurately predicts what mental states are correlated with what behavioral expressions. If a non-autistic child smiles when they are happy, for example, corresponding with the majority expression, and an autistic child flaps their hands, a minority presentation, it will be difficult for the two parties to understand each other. Empirically this theoretical expectation is evidenced by the fact that many psychological studies have shown that empathy is vulnerable to in group biases. In other words, we have more empathy for those who are like us (see, for example, Tajfel 1974; Brown, Bradley, and Lang 2006; Stürmer et al. 2006).

Finally, there are empirical studies which support the double empathy problem. For example, Sheppard et al.'s (2016) study showed that non-autistic perceivers were much better at making correct inferences when viewing non-autistic agents, compared with autistic agents, leading to autistic agents being rated less favorably. Similarly, in Crompton et al. (2020), it was found that chains of autistic people shared information as well as chains of non-autistic people. But groups of mixed autistic and non-autistic people fared less well, with much less information being shared. Mixed groups also reported lower rapport with the people they were sharing the information with. They thus conclude that, "autistic people have the skills to share information well with one another and experience good rapport, and that there are selective problems when autistic and non-autistic people are interacting" (2020, 1074).

Whether or not autistic people have a deficit in cognitive empathy, as compared to non-autistic people, then, is very much an open empirical question. Given the plausibility of the problem of double empathy, errors that autistic agents display in studies purporting to show that they have less cognitive empathy may well be the result of differences in style of expression and behavioral responses. Consequently, at least as things currently stand, there is not enough evidence to support premise 2) of Shoemaker's argument.

2.5 Moral Responsibility and Empathy

One difficulty in trying to assess the first premise of Shoemaker's argument stems from the different claims it might be making. Psychologists sometimes distinguish between dispositional or trait empathy and situational empathy. The former is a relatively stable, dispositional state of the agent, the ability one has to understand and share in others' mental lives. The latter is a manifestation of that ability in a particular situation. Consequently, premise 1) can be interpreted as:

(1) To be a morally responsible agent, one must have dispositional empathy (to the nth degree?).
(2) To be morally responsible for action ϕ, S must have dispositional empathy (to the nth degree?).
(3) To be a morally responsible agent, S must be capable of situational empathy.

(4) For S to be morally responsible for ϕ, S must be situationally empathic in the situation involving ϕ.
(5) For S to be morally responsible for ϕ, S must be capable of experiencing situational empathy (in the situation involving ϕ).
(6) For S to be morally responsible for ϕ, S must be capable of experiencing situational empathy (in some situation).

Given the unclarity surrounding dispositional empathy, the number of occasions it must be displayed, the degree of empathy required, etc., it seems reasonable to concentrate our attention on situational empathy. But even so, the claims about situational agency look implausible. There are lots of actions which we can be morally responsible for which don't involve having to empathize with someone else's perspective. For example, a person could be accountable for paying their taxes, recycling, giving money to various charities, etc. without even having to come into contact with other agents. To be at all tenable then, we need to restrict the thesis to actions which directly involve interacting with other agents.[9]

Shoemaker (see 2015, 115) explicitly allows that an agent might have the capacity for empathy on one occasion, but fail to exercise it and be morally responsible for that action, ruling out (4). Claim (3) entails (6), on the assumption that a morally responsible agent is one who can be morally responsible for some ϕ. But this still leaves the question of whether the agent must be capable of situational empathy in the particular situation they are in, or just in some situation. Shoemaker's claim that "An agent is accountable for some specific attitude or action just in case it accurately displays either" evaluational or emotional empathy, however, I think suggests the former (2015, 113). To motivate it, Shoemaker writes,

> Suppose my spouse has been terribly mistreated at work one day, and she comes home very upset. Once she tells me the story, if I am not upset as well—upset along the same dimensions as her, and with respect to what was done to her—this will likely occasion her anger, and it seems to do so fittingly; my lack of emotionally in-sync response is, in other words, a slight.
>
> (2015, 100)

Let us grant that Shoemaker is right about this case, still, it doesn't show that this capacity is required in every instance. It might be required in this interaction precisely because the husband can affectively empathize, but doesn't. Suppose, for example, that due to emotional processing differences, alexithymic Antony's feelings fail to affectively match what his wife is feeling.[10] He loves his wife dearly, however, and is deeply committed to her well-being. He makes every effort to make her feel better—cooking her dinner, doing all the chores—putting his needs completely to one side during her misery. I suspect his wife would not feel slighted, and not because she didn't hold him accountable for his actions, contra Shoemaker.

Less positively, now imagine that the spouse, David, is seriously depressed, and lacks the capacity to affectively empathize with his wife's woes at that time. Nevertheless, David may still be accountable for making derogatory comments about her abilities while listening to his wife, given that he knew that these would hurt her. Just because he could not share in her pain, does not mean he is thereby excused to treat her badly. So (5) is implausible.

Shoemaker might, then, fall back on the weaker (6). David is not off the hook, because he can sometimes be empathetic. We may wonder, if David doesn't need the capacity to be empathetic in this situation, why empathy matters at all for his accountability for the remark? The only answer to this question I can think of is one that embeds 3) and 6) into a more general thesis about moral development and empathy. So we might argue that, without empathy, David wouldn't have developed any moral understanding at all.

Understood as an empirical claim about human development, it is offered some support by Shoemaker's discussion of psychopaths (2015, 147–66). But as most of the accounts from psychopaths seem to demonstrate a lack of moral concern for other people (i.e. sympathy not empathy), and diminished experiences of moral emotions, such as pride and guilt, it is unclear if the problem stems from their lack of affective empathy or these other moral emotions (see Prinz 2011 for further argument). I am skeptical of the stronger necessity claim, that it is impossible for any agent to develop moral understanding without affective empathy. If an agent displays moral concern, caring about others' well-being despite a lack of affective sharing, why wouldn't this suffice? This wider issue requires more attention than can be given here, but it is worth stressing how weak the thesis now is: to be morally responsible for an action, which directly involves other agents, there must have been some occasion in which the autistic agent had the capacity for affective empathy. Understood in this way, its denial seems incredible.

It might be objected that I have been focusing on affective empathy. Greater difficulties for autistic people have been noted for cognitive empathy. Moreover, it seems likely that understanding other people's perspectives is necessary for at least some interpersonal interactions we might have. So, we might argue, for S to be morally responsible for ϕ, where ϕ involves interacting with another person, S must be capable of situational cognitive empathy regarding S's position.

There are times when we interact with other people, such as buying coffee at a café, when it seems implausible to claim that we need to have cognitive empathy for the person we are interacting with. It might not be possible to restrict the thesis to the class of cases we are interested in without circularity, in other words, without saying that, in all those cases were cognitive empathy is necessary, it is necessary that S is capable of cognitive empathy. But suppose, for the sake of argument, that this can be done so as not to render the thesis trivial. To focus our attention, let's consider an example outlined by Stout (2016, 410),

> While having lunch at a local restaurant, Adam encounters a friend of his. Recognizing that it is polite to ask one's friends about their family, he asks his friend if her brother is well. Let us suppose, however, that the friend's brother is currently serving an extended prison sentence (a fact which Adam knows) and that this is a source of deep shame for Adam's friend and her family. Adam's inquiry is very upsetting to his friend, and her feelings are hurt.

Stout argues that Adam is not morally responsible for hurting his friend, because "given his cognitive deficits, he would be unable to represent the counterfactual, 'If I were in my friend's situation, I would be ashamed of my brother, and it would be hurtful for others to bring up'" (2016, 410). We might, then, be tempted to argue that, as Adam lacks cognitive empathy in this case, and this is necessary for moral responsibility, he is not accountable for his actions.

I think that this analysis is mistaken however, since there is a more comprehensive explanation that can be given, which gets Adam off the hook. It is widely accepted, at least since Aristotle's *Nicomachean Ethics* (Bk 3 Ch. 1), that as well as control, agents have to meet certain epistemic requirements for it to be true that they were morally responsible for some outcome. If, for example, there was no way the agent could have known that the button would detonate a bomb, then they are not responsible for the explosion because they were ignorant of the harm they would cause. Now it is, of course, difficult to spell out this epistemic condition in full, but it seems that this is what we should appeal to. In other words, here, we have an instance where Adam is excused because he didn't know that asking his friend about his brother would upset her, and so he is not accountable for his action.

Rather than appealing to the epistemic requirement, why not say instead that Adam isn't morally responsible in this case because he lacks cognitive empathy? Imagine that, despite finding it difficult to understand his friend's perspective, somebody Adam knows to be reliable informs him just before the meal that he mustn't mention her brother as it will upset his friend. But Adam decides to do it anyway, as he is interested to see her reaction. Then it seems that even though, ex hypothesis, he lacks understanding of his friend's perspective, he is accountable because he knew his enquiry would cause harm and Stout stipulates that Adam "recognizes that he has moral reason not to do or say things that cause others pain" (2016, 114). Here, then, our accountability judgment tracks the epistemic condition, not the empathy condition, since Adam isn't excused on epistemic grounds in this case, but he would have been if accountability required cognitive empathy.

There is, then, no need to think that cognitive empathy is necessary for accountability. What we need for accountability is for the epistemic requirement to be satisfied, so that the agent is aware of the morally salient features of the situation. Of course, cognitive empathy is very useful for this end, and failures in cognitive empathy may well provide any agent with an excuse. But that excuse is covered by the more general requirement that they know the morally significant features of the situation, and agents can grasp those without empathy. Equally important is the understanding that comes from listening to others' testimonies.

2.6 Autism and Reasons-Responsiveness

If empathy is not required for moral responsibility, what is? In work elsewhere (2021), I have defended a control-based, reasons-responsive approach to moral responsibility, propounded most influentially by Fischer and Ravizza (1998). Rather than requiring that the agents in question are empathetic, according to the reasons-responsive approach, we should ask instead whether the agents were receptive and reactive to the reasons that there were, for the actions that they performed.[11] Stout (2016) challenges this approach, however, arguing that autistic moral agency poses a problem for the reasons-responsive view presented by Fischer and Ravizza. In this final section, I defend the reasons-responsive view from Stout's challenge, arguing that this approach to moral responsibility, plausibly construed, does track our judgments regarding moral responsibility and autism.

Let's begin, then, by saying a little more about Fischer and Ravizza's (1998) view. According to their analysis, the key to whether we have the right kind of control for moral responsibility depends upon whether the mechanism via which an agent acts is moderately reasons-responsive. Briefly, this is comprised of two elements. First, when the agent is acting, they must be regularly receptive to reasons. Given the actual mechanism in play, they

must be able to recognize what reasons there are and their grasp of reasons must reflect "an understandable pattern" (1998, 71), which is at least minimally "grounded in reality" (1998, 73). Second, the mechanism must be weakly responsive to reasons. Via it, we must be able to react to reasons. Fischer and Ravizza understand this in counterfactual terms,

> there exist some possible scenario (or possible world)—with the same laws as the actual world—in which there is a sufficient reason to do otherwise, the agent recognizes this reason, and the agent does otherwise.
>
> (1998, 63)[12]

To illustrate, suppose that I have good reason to write a reference for my student, as they are depending upon my reference to get a place on a course. According to Fischer and Ravizza, if there is an understandable pattern of nomologically possible worlds where I recognize that I have good reason to write this reference, and I do write it in at least one of those worlds, then I count as weakly responsive to that reason.

With this background in place, let's return now to the case of Adam, offered by Stout (§5). Stout thinks that we should judge that Adam is not morally responsible for upsetting his friend. But on Fischer and Ravizza's view, Stout argues, we must deny this. Stout writes,

> The fact that individuals with ASD are able to develop compensatory heuristics for moral judgments and to distinguish moral from conventional norms most of the time is evidence that they are capable of recognizing an understandable pattern of reasons that are minimally grounded in reality, and this general capacity is all that is required for regular receptivity according to Fischer and Ravizza.
>
> (2016, 409)

According to Stout then, since Adam is generally receptive to moral reasons, he satisfies Fischer and Ravizza's control condition, and so is responsible for the hurt he caused.

I doubt that this interpretation of Fischer and Ravizza's view is correct, however. As we have seen, according to Fischer and Ravizza, the actually operative mechanism is receptive to reasons if and only if there are possible worlds where, given the same kind of mechanism is operative, there is a sufficient reason to do otherwise, the agent recognizes that reason and the possible worlds constitute an "understandable pattern of reason-recognition" (1998, 75). Admittedly, there is unclarity regarding what counts as the "actually operative mechanism" on this view. But it seems clear that a reasons-responsive account shouldn't say that the agent only needs to have a "general capacity" to recognize reasons, as Stout assumes, since someone might be completely insensitive to reasons in one state, if they are having a psychotic episode for example, but after they have recovered, be receptive to reasons again. For the view to be at all credible then, we must at least allow that the mechanism in play, given the psychotic episode, differs from the mechanism employed when the agent is not so afflicted. Consequently, we are not primarily concerned with what reasons an agent can generally recognize, but rather with what reasons they can understand and discriminate, for the action that they undertook, given the mechanism in play.

Granted this understanding of reasons-responsiveness, how does it handle the case of Adam? I think that this is open to debate, since it is unclear quite how we should interpret Fischer and Ravizza's talk of "sufficient reason". Fischer and Ravizza explicitly state that it

isn't a motivating reason, but rather a justificatory reason—a reason which counts in favor of that action (1998, 41). But what about those justificatory reasons that we are unreceptive to due to ignorance? For example, consider the bomb case in Section 2.5, and suppose that there is no way the agent could have known that pressing that button detonates a bomb. Obviously, they shouldn't press the button, there are many good justificatory reasons not to do so. But do they thereby count as unreceptive to reasons? Well yes, in a sense, they don't know all the facts. But they might still be receptive to reasons in that, if someone told them the facts, then they would act accordingly and not press the button.

If Fischer and Ravizza would say that they are receptive to reasons in this case, then the reason that they are not culpable is because they fail to meet the epistemic requirements on moral responsibility (see Fischer and Ravizza 1998, ch.1, §III.2). I suspect that this is what they would say, as their text indicates that a reason is something which an agent thinks "justifies a certain course of action" (1998, 41–2). So a sufficient reason is, by the agent's own lights, the most justified course of action. Consequently, failures to know certain facts don't count as failures to recognize reasons, since the agent, being unaware of those facts, couldn't use them to justify their actions. If this interpretation is correct, however, then Stout's objection misses its target since, as I explained in Section 4.5, we should treat the case of Adam as one in which the epistemic condition on moral responsibility fails. Because Adam is unaware of certain key relevant facts, namely that his enquiry will cause his friend pain, Adam's failure of responsibility is due to his failing to meet the epistemic condition on moral responsibility, rather than his failing to meet the control condition outlined by Fischer and Ravizza.

It might be argued, however, that given the beliefs, desires, etc. that Adam had, he could have inferred that he had reason not to enquire about her brother. So Adam does have sufficient reason to do otherwise. For reasons given, I am skeptical of this reading of Fischer and Ravizza but, in any case, since Adam does have sufficient reason not to enquire after his friend's brother in the actual world, but he does not recognize that reason, there are grounds to suspect that he is not moderately reason receptive, as Fischer and Ravizza's control condition requires. Spelling this out in more detail, we can say that if Adam's actually operative mechanism were replicated in nomologically possible worlds, since they would plausibly include Adam's difficulty grasping other people's perspectives, in the relevant possible worlds where he has sufficient reason to do otherwise (i.e. those possible worlds which include the fact that his friend is deeply distressed by her brother's imprisonment), Adam still makes that enquiry.[13] So on this reading, Adam is not morally responsible for his enquiry since he fails to be receptive to the sufficient reason to do otherwise.

We might respond by pointing out that one can be ignorant of the harm one causes, or unreceptive to the reasons that there are, but nevertheless culpable. There are, after all, cases of negligence, perhaps this is just an instance of negligence on Adam's part? I agree that we can be morally responsible for negligence, but I think that the difficulties Stout stipulates Adam as having are relevant to our judgments here. To give a plausible account of negligence, we must consider what it was reasonable for the person to believe, given their situation and capacities. Hart, for example, influentially offers these conditions for instances of negligence,

> (i) Did the accused fail to take those precautions which any reasonable man with normal capacities would in the circumstances have taken? (ii) Could the accused, given his mental and physical capacities, have taken those precautions?
>
> (1968, 154)[14]

Given Adam's difficulties with cognitive empathy, we can say that, in light of his capacities, it was not reasonable to expect Adam to know that his enquiry would cause his friend pain. So Adam does not constitute a counterexample to the reasons-responsive approach to moral responsibility.

Indeed, the reasons-responsive approach, so interpreted, can nicely capture a significant feature of autism, namely its dynamic character. A dynamic disability is one in which the symptoms of the condition vary in severity. So the disabled person is able to perform a task at one time, but not at another. Dynamic disabilities are very common, rheumatoid arthritis, multiple sclerosis, neuralgia, ankylosing spondylitis, to name but a few, will all affect a person differently at different times. The same is true of autism. Just because, in one situation, an autistic person is receptive to reasons and can react appropriately, does not mean that they are able to in all.[15]

In the autistic community, there is much talk of "meltdowns", situations in which the person becomes so overwhelmed that they enter into a state of freeze, flight or fight. Consider, for example, Stella's description of a meltdown,

> Workmen coming, going, banging around and overwhelming paint smell stinging my nose—all of this change, all of this stimulation, and none of it under my control. I felt helpless, raw. I didn't think. I just struck my dad in the face. My boyfriend called the police. They kicked open the door and tackled me to the floor in the foyer. I panicked, the sounds and sensations in my head static, trying to find a home like a radio dial between channels. *I must not lash out. I must retain speech. If I don't the cops won't understand. Why? Why can't I stop?* That's what I kept asking myself.
>
> (Simone 2010, 185)

In the first instance, it seems that Stella is not receptive to the reasons that there are. Due to immense sensory overload and stress caused by changes to her environment, she unthinkingly acts. According to her self-report, she doesn't see the reasons that there are for not hitting her dad at that time, "I didn't think". Does the reasons-responsive account get this right? Arguably yes, since if we hold fixed the fight response caused by her panic, we see that in nearby possible worlds where she has sufficient reason not to hit her dad (as in this world), she still does.[16]

It might be objected that in some of those nearby possible worlds, in those where her sensory environment is different for example, Stella does see the reason for not hitting her dad and doesn't do it, so she is receptive to reasons. I think that this way of evaluating the possible worlds is mistaken, however. The environment is a triggering effect of her fight reaction. If we abstract from the trigger, and just hold fixed the mechanism actually in play, then we get the same result of her lashing out. Consequently, it seems plausible to claim that, holding fixed this internal state, she is not receptive to reasons.

The next aspect of her report highlights the second condition of the reasons-responsive account. Stella says, "I must not lash out", so here it seems that she acknowledges reasons for acting in a different way, but she feels helpless to control her reactions, "Why can't I stop?". Again, although the triggering environment might be absent in nearby possible worlds, we can still plausibly claim that, given the actual mechanism, it couldn't respond to her reasons in this and other nearby possible worlds. This is so even though Stella retains the general capacities of reasons-responsiveness. So we can suppose that, sometime later

after she has recovered, she is receptive to reasons and can act in accordance with them. Autism, then, does not constitute a counterexample to the reasons-responsive approach to moral responsibility, since this approach, at least granted this reading, does capture our attributions of moral responsibility in such cases.

2.7 Conclusion

In this chapter, I have argued against Shoemaker's claim that autistic people lack moral responsibility on the grounds that they lack empathy. Although an autism diagnosis requires some shared characteristics, it does not demand a lack of empathy, understood affectively or cognitively, or an inability to see and respond to reasons, or a lack of ability to do otherwise, or an inability to act on higher order desires or values, or any other of the conditions that have been argued to be required of morally responsible agents.[17] We must be careful, then, to avoid making sweeping claims about autistic people which might further marginalize them. What's the alternative? To simply carefully consider whether the individual, who happens to be autistic, satisfies the conditions laid down for moral responsibility by our favored theory, given the effects of their disability at that time in the particular circumstances in which they were acting.

In addition, I have argued, contra Stout, that reasons-responsive accounts, suitably developed, nicely capture our judgments regarding attributions of moral responsibility in cases involving autistic agents. Because of the social and sensory difficulties autistic agents often face, there may well be more occasions when autistic agents fail to meet the epistemic and control conditions necessary for morally responsible agency. In light of this, society and the caregivers of autistic people need to look carefully to see what reasonable adjustments can be made to help autistic agents remain in reasons-responsive states. But the same excuses apply equally to everyone. Consequently, there is no reason to exclude autistic people from the realm of morally responsible agents.[18]

Notes

1 The term 'reactive attitudes' comes from Strawson (1962, §3). Roughly, these are emotions, either directed at ourselves or others, which are aroused in interpersonal contexts as a result of the good or ill will an agent displays in their interactions with others. So negative emotions, such as guilt, indignation, resentment, disappointment etc. or positive emotions such as gratitude, love, approbation, etc. are all included.
2 This distinction follows Strawson's classic discussion (1962, §4), where he talks about different types of 'special considerations' which can be invoked to remove or modify our reactive attitudes. For further discussion, and this use of the notion of an 'exemption' and an 'excuse', see Wallace (1994, chapters 5 and 6).
3 See, for example, Aristotle (2014), Fischer and Ravizza (1998), and Vihvelin (2013).
4 See, for example, Scanlon (1998), Smith (2005), and Shoemaker (2015).
5 The use of low and high functioning terms is often discouraged by the autistic community, in part as it seems to imply that 'high-functioning autistics' need little support, whilst 'low-functioning autistics' are somehow lesser. I shall thus avoid this terminology, but it is worth noting how it is commonly used in the philosophical and psychological literatures.
6 For similar studies that replicate this result, see, for example, Black et al. (2018) and Ferguson et al. (2022).
7 In addition see, for example, Begeer et al. (2014), Zalla et al. (2011), and Rogers et al. (2007).
8 Ivy (who is now much older!) gave me permission to share this experience.
9 We might argue for 3) on the grounds that one couldn't be a moral agent without empathy. I return to this point later, but this wider claim goes beyond the remit of this chapter.

10 Alexithymia is often referred to as 'emotional blindness'. Although not currently classified by the DSM-5, it is characterized by a difficulty in identifying one's own feelings and expressing those feelings. It has been noted that there is considerable overlap between alexithymic and autistic individuals (with alexithymia occurring in about 50–85% of the autistic population, see Hogeveen and Grafman 2021), but one can occur without the other.
11 For different formulations of this general approach, in addition to Fischer and Ravizza who shall be discussed above, see also McKenna (2013), Vargas (2013), and Sartorio (2016). I also endorse this general approach (see Whittle, 2021), although I think that it needs qualifying for cases of negligence (see Whittle, forthcoming). In what follows, I shall assume that 'actions' include deliberate omissions, but exclude cases of negligence.
12 Use of 'possible world' has become commonplace in logic, linguistics, and philosophy. Very briefly, we can think of a possible world as a complete and consistent way the world is or could have been. Fischer's use of possible worlds, which I shall follow, relies on no more than this. Nomologically possible worlds are those worlds which are constrained by the actual laws of nature. For more on possible worlds, and their use in counterfactual scenarios, see Lewis (1973, 1986).
13 Or at least he does in most of them, and there is no 'understandable pattern' of reasons distinguishing between those scenarios in which Adam does and doesn't enquire about her brother. Consequently, if he doesn't, that is most likely due to chance events (such as his forgetting that she has a brother, for example), rather than because he has an understandable grasp of the reasons that there are.
14 Note that Hart's talk of the 'reasonable man' here should be interpreted as the average man. For more on Hart, and the notion of negligence more generally, see Whittle (forthcoming).
15 This does mean that we must deny Fischer and Ravizza's claim that 'reactivity is all of a piece' (1998, 73), but I think that this is indefensible in any case (for further discussion, see Whittle 2021, §6.3).
16 We might say that Stella has no such reason, as she doesn't know it. I think that this interpretation is strained since it seems that, at least in one sense of 'know', she does know that she has reason not to. Later in the extract she writes, 'No one needs to tell me that violence is unacceptable – physical or otherwise' (Simone 2010, 185). If we make this move, however, we can just say that she fails the epistemic condition, as in the first reading of the case of Adam.
17 For a proponent of the ability to do otherwise view, see, for example, Vihvelin (2013). For the higher order desire view of moral responsibility, see Frankfurt (1971).
18 Many thanks to my daughter, Ivy, and Simon Cushing for his very helpful comments.

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3

AUTISM, THE DOUBLE EMPATHY PROBLEM AND FEELING THE EMOTIONS OF ANOTHER PERSON

Sam Fellowes

3.1 Introduction

It is commonly believed that autistic people lack empathy. However, autistic individuals have challenged this. Some autistic people have claimed that non-autistic people lack empathy with autistic people, and I have seen autistic people claim that notions of autistic people lacking empathy are a myth and offensive. In this chapter, I will consider whether autistic feel empathy understood as the ability to feel the emotions of another.

The most popular way that autistic people challenge claims of lacking empathy is by appealing to the double empathy problem, which is a mutual lack of understanding between autistic and non-autistic people. As such, it is mistaken to say that autistic people have an inbuilt lack of empathy. Rather, when an autistic person is placed in an environment where there are lots of non-autistic people then mutual misunderstanding will typically follow. Both sides lack empathy with one another, and this lack of empathy is not inbuilt but is rather dependent upon being in an environment containing people of a different neurotype.

Although this is primarily a work of philosophy, the inspiration for writing this chapter is my own experience of being autistic. I feel I have significantly reduced ability to feel the emotional states of others. Additionally, of the multiple autistic people whom I have known well personally, none have expressed anything which suggests this ability is also not reduced in them. There seems to be a tension between, on one side, my interpretation of my own experiences and my interpretation of multiple autistic people I have known well, and on the other side, the claims made by many autistic activists. In this chapter I argue significant parts of the double empathy problem are correct but that autistic people can still have an inbuilt reduced ability to feel the emotions of another.

I start by explaining the ways that autistic people are said to lack empathy. I then contrast theory of mind deficits with the double empathy problem. I then outline how empathy has multiple aspects, and how I am focusing upon whether autistic people can "feel what another feels". I consider how the double empathy problem relates to different aspects of empathy, suggesting it is compatible with autistic people having limited ability to feel what another feels. In doing this, I also consider deeper philosophical bases for the double

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empathy problem and empirical evidence that is taken as supporting the double empathy problem. Finally, I consider whether difficulties with feeling what another feels entail being disordered rather than just being different and whether it has implications for morality.

3.2 Typical Accounts of Autism as Lacking Empathy

Autistic people are often seen as lacking emotions, not picking up on the emotions of others, being insensitive and not taking the perspective of others. They are sometimes considered robotic and computer-like, being governed more by logic rather than emotion or social convention.

These sorts of characteristics are taken as either instances of a lack of empathy or caused by a lack of empathy. For example, Frith talks of autistic people as having a lack of "emotional resonance" (2008, 79) when discussing empathy and autism. She gives the example of an autistic man whose wife had just lost her father. The autistic husband "showed no sympathy and talked loudly and disparagingly about his father-in-law, saying it was his own fault that he had cancer, since he smoked" (2008, 79). Schreibman talks of a "characteristic lack of empathy" (2005, 120) in autism. She cites experimental and anecdotal evidence of autistic children not noticing that someone is in pain or, if they do notice, not responding appropriately (2005, 120). This idea has a long history. For example, Rutter's definition of autism in 1978 includes "a lack of empathy and a failure to perceive other people's feelings and responses" (Rutter 1978, 10).

The notion that autistic people lack empathy is sufficiently prevalent that the claim is often explicitly objected to. For example, Stubblefield criticizes the "belief that autistics cannot empathize" (Stubblefield 2013, 145) and Fletcher-Watson & Bird complain that the "myth of an empathy deficit in autism is now [well] ingrained" (2020, 4). The notion that autism involves a lack of empathy is also objected to by autistic people. Milton and Green mention the "pernicious view of autistic people lacking empathy" (2024, 796), Hayden mentions the "misconception that autistic people lack empathy, that we don't express or feel emotion" (Hayden 2023, 57) and Hume & Burgess mention the "autism–empathy [deficit] myth" (2021, 222).

There is a clear dispute as to whether or not autistic people lack empathy. I will now contrast two theoretical frameworks for understanding autism and empathy. I start with theory of mind deficits which posits a lack of empathy and then consider an alternative account which is commonly endorsed by autistic people.

3.3 Theory of Mind Deficits

Psychologist Simon Baron-Cohen popularized the notion that autistic people have theory of mind deficits. At the more extreme end, this posits that autistic people are mindblind whereby they are unaware that other people have a mind. On a less extreme approach, autistic people struggle with seeing the perspectives of others even if they do think others have a mind. Baron-Cohen draws upon evolutionary psychology to posit that the brain developed various mechanisms as part of its evolutionary history (1995, 9). One of these is a theory of mind module (1995, 51). This module, when working with other modules, unconsciously ascribes mental attributes and intentions to living creatures. The vast majority of people do not simply perceive other humans as physical entities which have no substantive differences to other physical entities like trees and rocks. Rather, we take other people as having a mental life

which includes various beliefs and desires. While this usually works unconsciously, we also use those beliefs and desires to explain the behavior of others: someone goes to the fridge because they believe there is a drink in there and because they desire to quench a thirst. Positing mental states in this manner is a key aspect of most social interactions. Baron-Cohen takes the theory of mind module to play a very significant role in the attribution of mental states.

Baron-Cohen believes that, "to varying degrees" (1995, 5), the theory of mind module in autistic people is impaired. They are unable to, or are less likely to, ascribe mental states to others. When they do so the ascriptions are likely to be less accurate than non-autistic people. This is then one of the main reasons (though potentially not the only one) why autistic people lack empathy. The lack of ability, or reduced ability, to see the perspective of others means they cannot adequately understand the thoughts or emotions of others.

These claims are primarily based upon a significant level of experimental data. Tests aim to create situations where an autistic person has to place themselves in the perspective of another person. They typically involve understanding that one person has a perspective of a second person (or, on more complicated tasks, the second person has a perspective of a third person, and potentially that third has a perspective of a fourth person, and so on). Generally, autistic people will fail these in a way that non-autistic people do not. This is usually age specific, whereby autistic people fail these tests at ages at which non-autistic people pass them. As autistic people age, they are more likely to pass the basic tests but are more likely to fail them compared to similar-aged non-autistic individuals when greater levels of perspective-taking are required by these tests.

There are many potential problems with notions of theory of mind deficits. I will only list a few key ones here. First, most autistic people will pass the theory of mind tests as they age. They may struggle to pass more complicated ones and may take longer to pass more complicated ones, but ultimately it looks like they are able to see the perspective of others at least to some degree. Second, the idea of theory of mind deficits presupposes that perspective taking should be understood cognitively rather than as also involving a social and/or cultural environment. However, understanding one another is heavily influenced by social and/or cultural milieu, whereby one society or culture will have one set of explicit or implicit rules governing social understanding, while a different society or culture will have a different set of rules. The theory of mind deficits account seems to ignore how people are embedded within a society and culture. Third, theory of mind may provide an unrealistic account of how perspective taking works in relation to non-autistic people. Baron-Cohen thinks theory of mind modules work in an unconscious manner, yet it seems that our theory of mind module would effectively say to itself "well, if I was in the perspective of the person in front of me then action X would be appropriate and action Y would be inappropriate". Plausibly, our unconscious works in a much more implicit manner. While I do not think Baron-Cohen's notion of theory of mind is as bad as some critics make out, I do believe some major modifications would be needed to rescue it and that it is worth developing alternative theories which completely dispense with notions of theory of mind.

3.4 The Double Empathy Problem

Autistic people have argued that the notion that autistic people lack empathy or have a theory of mind deficit are problematic as they ignore how non-autistic people lack empathy with autistic people. The most well-known account making these types of claims is

known as the double empathy problem. The phrase "double empathy problem" is typically traced to an influential paper by an autistic writer (Milton 2012). This paper claims "that autistic people often lack insight about non-AS [autistic spectrum] perceptions and culture, yet it is equally the case that non-AS people lack insight into the minds and culture of 'autistic people'" (Milton 2012, 886). Both sides misunderstand one another. Since both sides misunderstand one another, rather than only one side misunderstanding the other, "it is a 'double problem' because both people experience [it], and so it is not a singular problem located in any one person" (Milton 2012, 884). The most detailed definition in that paper is

> The 'double empathy problem': a disjuncture in reciprocity between two differently disposed social actors which becomes more marked the wider the disjuncture in disproportional perceptions of the lifeworld – perceived as a breach in the 'natural attitude' of what constitutes 'social reality' for 'non-autistic spectrum' people and yet an everyday and often traumatic experience for 'autistic people'.
>
> (Milton 2012, 884)

There is a mutual lack of understanding between the autistic and the non-autistic due to differences between autistic and non-autistic people.

The double empathy problem potentially means lacking empathy is not distinctive to autistic people since they do not lack empathy more than anyone else. It would be misleading to claim autistic people lack empathy without also clarifying that their lack of empathy is no greater than the lack of empathy of non-autistic people. Additionally, the double empathy problem means we can relocate the lack of understanding of autistic people. Baron-Cohen understands theory of mind deficits as an inbuilt deficit on cognitive psychological terms, that is, to be autistic is to have theory of mind deficits. In contrast, rather than saying the lack of understanding is simply within the heads of the autistic individual, we can instead say the lack of understanding significantly depends upon environmental factors like social and cultural factors (Milton 2012, 884). Much more is involved than just the neurology of autistic people. This means we should not see autistic people as disordered due to their lack of understanding. As Milton writes, "[d]ifferences in neurology may well produce differences in sociality, but not a 'social deficit'" (Milton 2012, 886). Whereas Baron-Cohen sees the problem as being due to autistic people missing or having a defective theory of mind module, the double empathy problem puts the problem as being between mutual interaction of two differently disposed groups.

I agree that interpersonal communication depends upon implicit or explicit background assumptions and conceptions, and these will likely be influenced by neurology, psychology, and social and cultural factors. In so far as people vary in relation to these factors, mutual misunderstandings are likely. However, in what sense does this relate to empathy? As I will now outline, there are many different ways of understanding empathy, and it is not clear to me what notion of empathy is being employed in that 2012 article. The word empathy is not defined and the phrases "emotional empathy", "affective empathy", "cognitive empathy", "reflective empathy", and "perspective taking" are not present in the article. As Ekdahl notes, the double empathy problem "intriguingly steers clear of defining empathy" (2023, 3). I now outline various aspects of empathy and then apply them to theory of mind deficits and the double empathy problem.

3.5 What Is Empathy?

Empathy is a complicated and contested notion. People understand empathy in many different ways and often when people talk of empathy it is undefined or inadequately defined, which then makes assessing their claims difficult (Coplan and Goldie 2011, xxiv; Goldman 2011, 27). This is also true in relation to autism whereby a recent review looked at "111 papers on autism and empathy, [and] 31 unique conceptual interpretations of empathy were found. These diverged across 12 dimensions" (Bollen 2023, 6). This results in significant challenges when assessing claims that autistic people do or do not lack empathy.

Traditionally, a distinction is made between affective (emotional) empathy and cognitive empathy. Affective empathy relates to the emotions of another person, whereas cognitive empathy relates to the thoughts of another person. However, I think we can helpfully make more specific distinctions given that affect and cognition have multiple aspects. I believe Coplan has provided a helpful account of various aspects associated with empathy. I now quote Coplan:

a. Feeling what someone else feels
b. Caring about someone else
c. Being emotionally affected by someone else's emotions and experience, though not necessarily experiencing the same emotion
d. Imagining oneself in another's situation
e. Imagining being another in that other's situation
f. Making inferences about another's mental state (2011, 4)

The first three are related to affect (emotion), the latter three relate to cognition.

The first aspect is "feeling what someone else feels" whereby someone feels the emotions that someone else is feeling. Someone subconsciously attunes with the emotions of the other person. If one person is in emotional pain, then someone who empathizes with them feels that same or significantly similar emotional pain. They literally feel the same, or very similar, feelings as the other person.

The second aspect is "caring about someone else". This is where someone has a desire to help another person. The desire itself relates to wanting to help, rather than only desiring to help because there is a financial reward for doing so (though both aspects can be simultaneously present). It seems obvious that this is separate from "feeling what someone else feels". Someone can care about someone they have never met, or whom they have met without having emotionally attuned with, or someone whom they mistakenly believe to have successfully emotionally attuned with.

The third aspect is "being emotionally affected by someone else's emotions and experience, though not necessarily experiencing the same emotion". This is where the emotions you feel are influenced by the emotions and experiences of someone else. If someone else is suffering emotionally then you start suffering yourself. This is distinct from "feeling what someone else feels". When someone feels the feeling of someone else, they literally feel the same or very similar emotional pain to them. In contrast, someone can have knowledge that someone is upset without also feeling the same emotions that they do. You might see someone crying, know why they are crying, feel bad that they are crying but never emotionally attune with them and thus never feel their exact emotion. It is also distinct from caring

since someone might feel bad about the pain of someone else and then rationalize that the other person deserves the pain.

The fourth to sixth aspects relate to cognition. The fourth aspect is "imagining oneself in another's situation". This is where Tom imagines what it would be like to be Tom in Amy's situation.

The fifth aspect is "imagining being another in that other's situation". Whereas the fourth aspect involves imagining yourself in a particular situation, here we are imagining being someone else being in that person's situation. On this aspect, Tom aims to imagine what it is like to be Amy in Amy's situation.

The sixth aspect is "making inferences about another's mental state". This is where we have a level of accurate or inaccurate information about another person (their characteristics, their situation, or both) and use this information to make inferences about what is occurring in the mind of the other person. We use the information to infer they are, for example, angry or bored. It is less clear whether this sixth aspect differs from the fourth and fifth aspect since imagining the situation of another can be understood to involve (on theory theory) or not involve (on simulation theory) inferences about mental states (see Coplan and Goldie 2011, xxxii-xxxiii) for discussion of theory theory and simulation theory).

Outlining these six aspects of empathy is a helpful way to highlight how broad notions of empathy are. We group together quite a lot of things under the name empathy. For example, we can think of empathy as being attained or not attained when a nurse is caring for a patient, when a police officer is supporting a victim of crime, when two people are in a romantic relationship, when parents and children communicate and when walking past a homeless person. It seems plausible that there are significant differences in each case. This then raises the question of whether empathy is actually just one phenomenon with multiple aspects or actually just multiple distinct phenomena (Goldman 2011, 27).

Additionally, whether we think of empathy as one phenomenon or multiple phenomena, this raises the question of whether all the aspects of empathy are equally important or are some more important than others. It seems plausible that different aspects, and different combinations of aspects, will vary in usefulness in different situations. For example, different aspects might be required in the nurse, police officer, romantic couple, parent and child, and homeless person examples mentioned above. Additionally, which aspects are most important might also depend upon what the relevant parties want, or even what they should want. For example, a particular couple in a romantic relationship might want something particular out of the relationship, whereas a different particular couple might desire something quite different from their relationship. What constitutes useful empathy might differ in each case. Also, there is the philosophical question of what people should want, a question tied up with the contested question of what is the good life.

Finally, there is the problem that different aspects of empathy might relate to other aspects in complicated ways. Being successful at some aspects may increase the success at other aspects. Also, a lack of success at one aspect might then reduce the success at other aspects. However, someone might be able to score very highly at one aspect without also scoring highly at many of the other six aspects. Additionally, the same, or very similar, end result might be achieved through using different aspects of empathy.

For all these reasons, I think we need more detail when discussing empathy than simply making a division between cognitive empathy and affective empathy. In this chapter, I aim to establish how autism relates to one particular aspect which Coplan mentions, specifically,

feeling what another feels. I will apply these notions which Coplan makes to theory of mind deficits and the double empathy problem.

3.6 Theory of Mind Deficits and Aspects of Empathy

Baron-Cohen's notion of theory of mind deficits seems to incorporate three of Coplan's aspects of empathy. It looks like all three of the aspects relating to cognition are impaired in autistic people. "Imagining oneself in another's situation" and "imagining being another in that other's situation" are going to be impaired if autistic people struggle to see others as having mental states. They will struggle to see others as having a unique perspective. Additionally, "making inferences about another's mental state" will be impaired if they struggle to see other people as having mental states. Baron-Cohen's theories have been extensively criticized and my interest in this chapter is in the "feeling how another feels" aspect of empathy, so I shall only comment that imagining the perspectives and psychological states of others very much does not come naturally to me but it is something that I can do (with varying degrees of accuracy) if I actively try to.

As regards the three aspects of empathy which relate to emotion, Baron-Cohen actually thinks autistic people only lack cognitive empathy and do not lack affective empathy. His notion of theory of mind deficits does not appear to relate to emotion, as he explicitly states that "[m]y model of the mindreading system says very little about the role of emotion" (1995, 136). I have not, however, been able to find explicit statements about whether autistic people can or cannot feel what someone else feels. Also, it is worth noting that Baron-Cohen's beliefs about affective empathy and autism may not be representative of autism researchers more broadly. It is certainly true that "much of the empathy research in autism has focused upon the cognitive component of empathy" (Fatima and Babu 2022, 757). However, the limited research on affect has often concluded it is impaired. A recent meta-analysis of 35 articles found that psychological studies of empathy in autistic people generally conclude that both cognitive and affective empathy are reduced in autistic people (Fatima and Babu 2022).

3.7 The Double Empathy Problem and Aspects of Empathy

The double empathy problem does seem to map onto the three cognitive aspects of empathy. It seems to track an important distinction which Coplan makes between two different aspects of empathy. She demarcates between "imagining oneself in another's situation" and "imagining being another in that other's situation" (the fourth and fifth aspect of empathy discussed above). The double empathy problem seems to convey this rough distinction. When "imagining oneself in another's situation" you imagine yourself in the situation of the other person. Tom aims to imagine what it would be like to be Tom in Amy's situation. You imagine yourself in the situation of the person whom you are aiming to empathize with. In contrast, when "imagining being another in that other's situation", you aim to imagine what it is like to be the other person in that other person's situation. Tom aims to imagine what it is like to be Amy in Amy's situation. You actually try and imagine what the other person is like. I take this demarcation as being relevant for "making inferences about another's mental state" since whether Tom imagines being Tom or imagines being Amy in Amy's situation will influence how accurate Tom's inferences about Amy's mental states will be.

It is easy to see how "imagining oneself in another's situation" can lead to inaccuracies. You affectively impose your own characteristics onto someone else who might have quite different characteristics, likely resulting in significantly inaccurate inferences about the other person. Coplan suggests that this approach is the default position that most people take (2011, 10). If so, then non-autistic people likely make incorrect inferences about autistic people the majority of the time.

In contrast, "imagining being another in that other's situation" seems a much better approach for successful non-autistic to autistic understanding. A non-autistic person should aim to understand what it is like to be an autistic person when trying to take the perspective of autistic people. This "requires mental flexibility… [to] suppress our own perspective… [and requires] at least some knowledge of the target" (Coplan 2011, 13). We need both to actively try to move away from our perspective and to replace it with an accurate understanding of the relevant characteristics of a different perspective. This "is not easy, particularly when the other is someone very different from ourselves" (Coplan 2011, 13). This suggests that non-autistic people face significant challenges when aiming to successfully "imagine being another in that other's situation" with autistic people.

Though using different language, the double empathy problem effectively poses that non-autistic people need to "imagine being another in that other's situation", rather than just "imagine oneself in another's situation". For example, "understanding an autistic person… will mean putting away one's own assumptions based on one's experiences, if one is not part of that minority or culture, rather than relying on them" (Milton in Nicolaidis 2018, 8). This suggests that someone relying upon their own assumptions will be unlikely to understand the autistic person. Similarly, understanding autistic people requires "a developmental understanding of how differences in the social lifeworld of autistic and non-autistic unfold at both the macro (i.e. lifespan/development) and micro scale (i.e. within social relationships at work or school)" (Milton, Gurbuz, and López 2022, 1902). This suggests that for a non-autistic person to understand the perspective of an autistic person, they need to understand the characteristics of that autistic person. All this suggests that the double empathy problem gives a good account of barriers to non-autistic people successfully attaining cognitive empathy with autistic people and provides potential solutions to those barriers.

So far as I can tell, the double empathy problem seems less applicable to emotion that to cognition. Emotion and affect seem to be mentioned much less. For example, "differences in embodied cognition and sociality… are key to understanding autism and thus also in understanding the double empathy problem" (Milton, Waldock, and Keates 2023, 86), a statement that does not mention emotion. Additionally, various concerns about notions of affective empathy can be found within the literature on the double empathy problem. It has been suggested that what is considered appropriate affective empathy depends upon social norms (Milton, Waldock, and Keates 2023, 79), that both apathy and antipathy can influence whether affective empathy is attained (Milton, Waldock, and Keates 2023, 80–1) and that emotional empathy could even be an "illusion" (Milton, Waldock, and Keates 2023, 80–1). However, I cannot find clear statements explicitly saying the double empathy problem is or is not intended to be applicable to affective empathy.

Even if notions of affective empathy were rejected, it is not clear to me what, if anything, advocates of the double empathy problem take the double empathy problem as entailing about autism and feeling what another feels. For example, if an advocate of the double empathy problem thinks it gives reason to deny that autistic people have social deficits, do they

also think it gives reason to deny that autistic people have deficits at feeling what another feels? Are autistic people being taken as, firstly, not being different at feeling what another feels, secondly, as being different but the difference not being a disorder, or thirdly, as being different in a manner which is disordered?

I believe it would be helpful if there was greater indication of whether the double empathy problem and claims that autistic people do not have an inbuilt lack of empathy are or are not taken as covering feeling what another feels. I think establishing this is especially important because "most researchers" (Maibom 2017, 2) think feeling what another feels is an important part of empathy. Without knowing how the double empathy problem relates to feeling what another feels, an important claim made by researchers who think autistic people lack empathy is not being explicitly addressed.

My own experiences of being autistic make me think the double empathy problem has limited applicability to questions of feeling what another feels. I see little reason to believe many autistic people are good at feeling what another feels. I feel very limited ability to feel what someone else feels, be they autistic or not, and no autistic person I have known personally has indicated any greater ability to feel what another feels. There can be situations where someone I care about deeply is emotionally upset and I feel basically nothing emotionally. They could be crying in front of me, and I remain largely emotionally flat. Other times, I will feel bad that they feel bad, but I am not feeling their pain. I feel bad because I do not want them to suffer, but I am not feeling their suffering. So far as I can tell, my level of subconscious emotional attunement is extremely low. This does not mean that I do not care. I will make a significant effort to help the person in pain, but still not feel any of their emotions (or much emotion at all). When we consider Coplan's aspects of empathy, I do "care about someone else", sometimes I am "emotionally affected by someone else's emotions and experience" but I am not "feeling what someone else feels".

Also, I feel that both myself and the autistic people I have known well have significant levels of emotional flatness. I can be aware that non-autistic people have emotions even if I cannot feel those emotions, whereas the levels of emotion displayed by those autistic people seem much lower (which is not to suggest that they are completely emotionless or that specific situations will not evoke significant levels of emotion). As such, autistic to autistic communication for me has been a case of me being unable to pick up on emotions and the other autistic person not giving out emotions. If I am right about this then I think this gives quite a significant modification to the image of autistic to autistic and autistic to non-autistic communication from that offered by advocates of the double empathy problem. Alternatively, if advocates of the double empathy problem agree with this then I feel it would be helpful if this was stated explicitly.

It is sometimes recognized that autistic people can be alexithymic. That is, they have "difficulties in experiencing, identifying, expressing and describing emotions" (Kennett 2017, 370). It has been "estimated that around 50 per cent of people with autism are severely alexithymic, with the majority showing at least some degree of alexithymia" (Kennett 2017, 370). If so, then this could be taken to explain my and other autistic individuals' limited ability to feel what another feels. However, alexithymia might be a slightly different phenomenon. Most definitions of alexithymia seem to relate to difficulties identifying, expressing, and describing emotions, whereas what I describe relates to the emotions not being there in the first place. Potentially, alexithymia could mean that I can feel what another feels but I just do not recognize this due to alexithymia. This, however, raises the conceptual issue

of how I can phenomenologically feel something without being aware of it. Being aware of something is arguably different from being able to identify and describe it, but I do not have room to explore this conceptual issue. If, however, alexithymia does explain my inability to feel what another feels then I think this gives additional reason for the relationship between the double empathy problem and feeling what another feels to be explicitly addressed. I now consider other ways of understanding the double empathy problem and relate these to feeling what another feels.

3.8 Empathy as Embedded Within a Social Context

The double empathy problem emphasizes that social understanding takes place in a context that typically is set up to favor non-autistic people. "The deficit model of autistic social interaction fails to acknowledge relationality and how social reality is constantly reconstructed and contested by social agents" (Milton, Waldock, and Keates 2023, 79; Milton, Gurbuz, and López 2022, 1902). The basic idea is that social interactions take place within a social community. Social communities have various written or unwritten rules about what constitutes legitimate social interaction. Additionally, people are socialized on those explicit or implicit rules through social structures like education systems and work places. Finally, these rules typically are determined by non-autistic people (or more specifically people of the dominant neurotype, gender, race, sexuality, etc.). Both the rules themselves and how we are socialized to learn those rules favor non-autistic people, causing autistic people to struggle to learn the rules and to struggle to implement the rules once learned. This broadly seems like a good critique of notions of cognitive empathy employed by cognitive psychology, highlighting how cognitive psychology risks seeing people as unrealistically decontextualized from their social environment and culture. How might this relate to feeling what another feels?

Emotional empathy is sometimes taken to be pre-cognitive and pre-reflective (Coplan and Goldie 2011, xxiii). There is also a phenomenological tradition which posits that people can literally see the emotions another person is exhibiting (Gallagher 2017, 161). On these accounts, we do not need to make inferences about the emotions of others or reflect upon what emotions others are feeling, rather, we just literally feel them. Such accounts seem incredible to me, whereby I struggle to imagine how this could be possible. However, if I lack this ability, then it is unsurprising that I find descriptions of it to be unconvincing. I need to take seriously that this is what can occur in non-autistic people. The double empathy problem seems related to perspective taking, whereas this approach to emotional empathy occurs before perspective taking. This might mean that social understanding being embedded in a social context is relevant to perspective taking, but it might be less applicable to emotional empathy. However, I now consider two different philosophical approaches for seeing autistic and non-autistic understanding as socially embedded and I relate them to emotion.

First, Robert Chapman draws upon a Wittgensteinian framework whereby social communication depends upon the language games of a community (2019). Different societies will have different language games, meaning that there will be different explicit or implicit social rules governing social understanding. Given Wittgenstein's well-known critique of private language, this means social understanding is not simply in the heads of people but rather depends upon a social community with a particular language game. I think this is a nuanced approach which provides a significant improvement to typical cognitive psychological approaches which ignore the social context. However, this argument might not be as

applicable to emotion. We can see phenomenology of feeling of emotions as pre-language. We might need to use language to communicate about emotions, thus we can consider emotions as part of a language game, but the actual feeling of emotions might be independent of the language game. Of course, what we feel can be influenced by concepts, whereby living in a society which lacks a word for anger might influence a person's experience of what we call anger. However, the factors influencing what someone feels are different from the phenomenological experience of feeling and it is this that could be pre-language. This might mean the ability of someone to feel what someone else feels is not dependent upon, or has limited dependence upon, a language game.

Philosophers sometimes draw upon notions of 4E cognition to argue that cognition in some sense extends into the world around us. This can mean how people cognize can be dependent upon the social environment. This supports the idea that the social environment can influence the ability of autistic and non-autistic people to understand one another (see Fellowes forthcoming for application of this to the double empathy problem). However, 4E cognition relates to, as the name suggests, cognition and is not usually been extended to emotion (Colombetti and Roberts 2015, 1244; León, Szanto, and Zahavi 2019, 4847). However, there has been some recent work on notions of 4E emotion whereby emotions can extend into the external world. For example, a mourning musician might be playing a piece of music. How they play is influenced by their grief, and the resulting music then further influences their grief, which in turn then influences the music (Colombetti and Roberts 2015, 1258; Slaby 2014, 32). In some non-trivial sense, the grief extends into the world and is in turn influenced by this process. It raises the possibility that an autistic person might be able to feel what another autistic person feels if the environmental setup was right. Therefore, the problem is not with the autistic person but the environment. I now outline a reason to doubt this. Leon, Szanto, and Zahavi put down multiple criteria for shared emotions on a 4E emotion framework. One criterion is

> [t]o feel an emotion not simply as one's own but as *ours* [i.e. shared between two people], requires that one identifies with the other(s) in order to experience oneself as *one of us*… By expressing oneself through the eyes of the other, by incorporating the other's perspective on oneself, one can come to see oneself as fundamentally like the other
>
> (2019, 4861, emphasis original).

My own experiences of interacting with autistic people I have known personally do not meet this criterion. I feel more comfortable around and feel greater ability to understand autistic people compared to non-autistic people, but this is not accompanied by incorporating the other autistic individual's view of myself within my own view of myself. Perspective taking whereby the perspective of one person is dependent upon the perspective of another is something experimental evidence suggests autistic people are not good at. So far as I can tell, I struggle with that type of perspective taking with both autistic people and non-autistic people.

3.9 Experimental Evidence for the Double Empathy Problem

There is experimental evidence that is taken to support the double empathy problem. The most well-known is by Crompton et al. Using experimental tasks and non-structured social settings, they found that pairs of autistic people had a level of rapport which was

approximately equal to the rapport held between pairs of non-autistic people. In contrast, the autistic to non-autistic pairs had a lower level of rapport (Crompton et al. 2020). This is then taken to support the double empathy problem, whereby "autistic difficulties in building rapport are not a deficit within an autistic individual, and instead arise within interactions with non-autistic individuals" (Crompton et al. 2020, 10). However, none of the studies seemed to have much relationship to emotion. The experiments and the non-structured social setting did not seem to involve feeling what the other person feels. None of them involved, for example, one individual being in emotional distress and the other individual feeling or failing to feel the same emotion. If autistic people struggle to feel what another feels then I cannot see how the studies by Crompton et al. would pick this up. Additionally, arguably there are multiple means to high levels of rapport. Maibom suggests that cognitive empathy does not have to involve affect, whereas affective empathy typically involves both cognition and affect (2017, 2). If this is correct, non-autistic people might attain high rapport through using both cognitive and emotional empathy, while autistic people might attain similar levels of rapport by only using cognitive empathy. If autistic people struggle to feel the emotions of another, and if autistic people are not giving out much emotion, then lack of feeling what another feels might not reduce rapport.

I have seen it claimed that some autistic people have excessive levels of empathy. While this is radically opposite to my own experience of autism I do not want to rule it out given the heterogeneity of autism. A recent paper aims to show how autistic people can have very high levels of empathy by drawing upon the intense world theory of autism (Rizzo and Röck 2021). The intense world theory of autism posits autistic people struggle with social interaction because they find the external world sensorially overwhelming (Markram, Rinaldi, and Markram 2007). Rizzo and Röck admit the proposal is tentative but think the intense world theory "may be a starting point for an alternative way to conceptualize the emotional aspect of autism as not a disorder of empathy, but as an oversensitivity [of empathy]" (Rizzo and Röck 2021, 43). Rizzo and Röck write that "a substantial number of autistics claim… [to] not only [be] able to emotionally empathize but also to do it in an overwhelmingly way" (Rizzo and Röck 2021, 35) but the only evidence of autistic people reporting this is citing three blog posts by different autistic people. In relation to affective empathy, one blog post mentions "an emotional response to what someone else is thinking or feeling" (Jack 2020), "feel[ing] emotionally overwhelmed when you hear of someone else's distress" (Jack 2020) and that you care despite not exhibiting a response straight away or in a typical fashion (Jack 2020). None of these are feeling what another feels or being overwhelmed by feeling what another feels. The other two blog posts mention the autistic person feeling their own emotions very intensely but make no mention of feeling the emotions of others (Acanfora 2018; Hanson 2019). How the intense world theory relates to emotion deserves further study. However, it is important to demarcate between (1) being overwhelmed by knowing that others have emotions which you cannot read, (2) being overwhelmed by actively trying to read the emotions of others, (3) being overwhelmed because you care, and (4) being overwhelmed because you are feeling the emotions that others are feeling. I can relate to (1), (2), and (3) but I cannot relate to (4). I have not seen clear examples of autistic people specifically stating that (4) is present. Without evidence of (4), the intense world theory does not support autistic people being good at feeling what others feel.

3.10 Disorder and Limited Ability to Feel What Another Feels

I now consider how my argument relates to disorder. The double empathy problem is taken as challenging the notion, at least in relation to empathy, that autistic people are disordered. Milton writes that "[d]ifferences in neurology may well produce differences in sociality, but not a 'social deficit'" (Milton 2012, 886). The idea is that autistic and non-autistic people have a different approach to socializing and that neither side has the better approach despite the mismatch. Both sides have a different lifeworld rather than one side having a better lifeworld. This is further supported by the notion that part of the problem lies with society and culture being primarily set up for non-autistic people. However, if I am right to say the double empathy problem is compatible with an inbuilt reduction in an ability to feel what another feels then how does this relate to notions of autistic people as disordered?

Questions about disorder are arguably inseparable from questions of values. Philosophers of medicine have long debated what constitutes good values for demarcating health and disorder. This is a controversial topic and I think most suggested values, as with most philosophical debates about ethics, have both strengths and weaknesses (see for discussion Cooper 2007). I think a disorder needs to have all the following characteristics: it is something bad to have because it impoverishes someone's life, it is largely outside of someone's control (they need to make very significant effort to mitigate it), and it has some basis in the individual (even if is affected by external circumstances). By "impoverishes someone's life" I mean that it is something that means they miss out on important experiences, and I am measuring this by something that is plausible for modern humans (people might miss out by not having telepathy but this is not a plausible option measured by modern humans).[1] Accepting that "having some experiences is important" may ultimately come down to an intuition that cannot be further explicated in the same way that accepting that "inflicting pain is wrong" might ultimately rest upon an intuition that cannot be further explicated.

On the values that I hold, I think my lack of ability to feel what another feels leaves me disordered because I miss out on important experiences. There are qualitative experiences that I would like to have which I seem to have very reduced ability to have. Slaby says that interpersonal emotional attunement "give[s] rise to a richer phenomenal experience" (Slaby 2014, 42). I want that richness and I feel largely barred from it. Also, I want to experience what another person is feeling because it is a connection with that other person which has a qualitative element lacking from cognizing about what another person feels. Knowing someone I care about is in pain is important, but I would prefer to also feel what they are feeling to fully appreciate the particulars of the person. Without this, there is a depth of understanding of other people which I cannot access. I get glimpses of what I take to be a deeper world of emotion through, for example, the films of Kubrick and Tarkovsky, or the novels of Solzhenitsyn and Le Guin, but the depth of feeling they can invoke in me is nearly completely absent in my interpersonal relationships with people I care about. On my values, whether ultimately based upon an intuition that cannot be further explicated or not, my very limited ability to access the depth of emotion in other people who matter to me means I am disordered.

When advocates of the double empathy problem say autistic people do not lack empathy they often emphasize that autistic to non-autistic communication takes place in a social context and that both sides have a different lifeworld. I am not sure that this appeal to social contexts and differing lifeworlds itself shows that autistic people are not disordered. For example, imagine we consider someone to be disordered because they have nearly

uncontrollable desires to kill people. They have a very different lifeworld from most people and that clash of lifeworlds will occur precisely because they want to kill people and others do not want them to do that. Despite this, that person should be considered disordered. Additionally, we might have social arrangements that fit that person well. They might legally kill people by joining a government-sanctioned militia that murders political opposition, or they might join a police force that is not legally allowed to kill people but their corrupt fellow officers conceal any evidence of them killing people. In these situations society might allow this person to thrive or at least get by pretty well, yet we should still consider them to be disordered. Being barred from important experiences by a limited ability to feel what another feels seems like a disorder to me regardless of how my lifeworld clashes with other lifeworlds and regardless of society being set up for non-autistic people.

Autistic people are certainly affected by external factors but we can still meaningfully think of them as having internal factors as well. Given that people are affected by so many different internal and external factors, I think that generally the demarcation between internal and external can only be made on pragmatic grounds. To say something is internal to an autistic person should be understood as saying the internal factors are sufficiently important and the external factors are sufficiently unimportant that we are going to idealize away the external factors. I do not think this makes claiming something is internal illegitimate; rather, it just means we need to realize it is an idealization. On these grounds, I think we can meaningfully talk of lack of ability to feel what another feels as being largely, though not fully, internal to the autistic individual.

Advocates of the double empathy problem emphasize that we need to change society and I fully agree with this. We still have very strong ethical grounds to help people by altering society even when disorders are primarily or entirely internal given that they manifest in a social context. At the same time, there might also be ways of helping through targeting the individual. I do not know if such medication is possible but if there existed a medication which helped me feel the emotions of another, then unless it had pretty bad side effects, I would take it. Similarly, perhaps therapies could be developed which would help me with feeling what another feels. What stance would advocates of the double empathy problem take toward such hypothetical medications and therapies? Would they be considered a waste of time, since there is no inbuilt problem? Would they be considered an unethical means of suppressing autism, just like how medications and therapy to reduce same sex attraction would be considered unethical? Or would taking such medications and accessing such therapies be considered perfectly legitimate providing the autistic person consents to doing so, much like how many neurodiversity advocates consider ADHD a neurodiversity but do not object to prescribing Ritalin. I do not know what stance advocates of the double empathy problem would take here and I think the debate could be enhanced if they addressed these questions.

3.11 Morality and Difficulties With Feeling What Another Feels

A concern about autistic people lacking empathy is that it might mean autistic people are in some sense morally deficient. This could be understood as empathy being necessary for morality, empathy as being sufficient but not necessary for morality, and empathy as being helpful for morality but not necessary or sufficient (Kauppinen 2017, 221). That autistic people cannot have genuine morality is a general theme of Barnbaum's book (2008) (although she seems to have modified this in more recent work [2013, 137]). There is certainly

a trend going back at least to Hume of seeing morality as having a basis in feeling, although most major schools in philosophy today would reject this. This line of argument might suggest that a limited ability to feel what another feels results in moral deficiency. It is worth noting that influential psychologists who think that autistic people lack empathy do not take this approach. For example, as mentioned earlier, Frith mentions an autistic husband who spoke harshly about his recently deceased father-in-law in front of his wife because the cancer he died from was due to smoking. Frith also mentions that he "is very aware of other people's suffering in an abstract sense. He always gives generously to a charity in Africa" (2008, 79). Also, Baron-Cohen emphasizes that autistic people are not deficit at morality, writing that "[p]eople with AS [autism] may have trouble empathizing, which imprisons them inside their own selves, but they are frequently highly moral individuals, who think deeply about how… to be good" (2005b, 178).[2]

As an autistic person who is a vegan, who does not buy new non-fairtrade clothing, who has (probably) stopped flying and who gives a proportion of his income to charity, it seems that I am making significantly more effort morally than most non-autistic people. As such, I am unconvinced by claims that empathy, or at least feeling what another feels, is required for morality. I can and do hold a moral belief that suffering is bad even if I cannot feel the suffering of another. There are situations where someone is suffering currently or will suffer due to my actions and I do not pick up on this. This is not good and I feel significant regret about situations where this has happened previously. However, there are forms of suffering that cannot be detected through an empathetic relationship. For example, the suffering of animals on factory farms cannot be detected through emotional empathy when I see meat. I similarly cannot emotionally empathize with people in other countries doing boring jobs for low pay when I see clothes. I also cannot emotionally empathize with people yet to be born who will feel the full impact of climate change.

I might be biased but I feel that reason and rationality are a better guide to morality than emotion. Additionally, in my experience, I find that autistic people can be quite rule bound when it comes to morality, having a strong moral code that they are largely inflexible about. I think being inflexible morally is generally a good thing even if there can be situations when taking the best moral path might require flexibility. Trying to work out the best moral approach and stick to it, only deviating from it if you find a better moral approach, seems generally a good approach to me.

3.12 Conclusion

I have demarcated between six different aspects of empathy and considered whether we have reason to think that autistic individuals might struggle to feel what another feels. I argued that the double empathy problem seems primarily related to cognition rather than emotion. The current experimental evidence in support of the double empathy problem seems very unlikely to pick up on the presence or absence of feeling what another feels. Finally, a deeper philosophical basis for the double empathy problem, like a Wittgenstein approach and 4E cognition, also seems less applicable to emotion. This suggests that the double empathy problem is compatible with autistic people having limited capability to feel what another feels.

My arguments suggest further directions of research. Experimental studies and phenomenological studies which specifically target the issue of autistic people feeling what another person feels could be conducted, especially in relation to autistic-to-autistic feeling what another

person feels. More details on autistic people who consider themselves to be hyper-empathetic and to what degree this relates to feeling what another feels could be established. Finally, whether notions of 4E emotions could give the double empathy problem more applicability to emotions deserves further study. Doing these would provide a stronger basis for understanding how many and in what manner autistic people can feel what another feels.

I feel advocates of the double empathy problem should state what aspects of empathy they take the double empathy problem to cover. Alternatively, it should be explicitly stated if they feel there is insufficient evidence or theoretical reasoning to allow us to establish whether a particular element should be covered by the double empathy problem. Otherwise, blanket statements that autistic individuals do not lack empathy conceal ways in which autistic people can lack aspects of empathy. I think some ways of understanding the double empathy problem that seem popular among many autistic advocates conceal the way I am autistic. Additionally, on the values I hold my lack of ability to feel what another feels is a disorder. I think I am missing out on something important. I would prefer this recognized rather than concealed.

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Notes

1 This definition needs some caveats. Firstly, I have never seen an account of disorder which did not face many counter-examples and the same will be true of this one. Secondly, someone might be disordered in one area but have advantages in other areas. Thirdly, it is possible that the majority of the population are disordered on my account given that most humans are bad at introspection and that cognitive biases are widespread throughout the population. I have mixed feelings about whether most people being disordered on my account of disorder is a strength or weakness of my account.
2 Baron-Cohen's wording of "imprisons them inside their own self" (2005b, 178) is not the best choice of words but there is a phenomenon I call "getting stuck in my own head" which I think he is getting at. I sometimes actively try and connect with people in the world around me, including people I care about and who are making every effort to connect with me, and my head just defaults back to connecting with objects.

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4

AUTISM FROM THE SECOND PERSON PERSPECTIVE

Francisco García

4.1 Introduction

I have autism. The first contact I had with my condition in philosophy was in the context of learning about social cognition. "We can predict or explain the behavior of others because we have a Theory of their Minds" said some textbook I can't remember now. But crucially, as an aside, the textbook said, "autistic individuals lack a Theory of Mind", a position first introduced by Baron-Cohen, Leslie, and Frith (1985). "That can't be right", I thought to myself. I use a theory of mind all the time. I often have to resort to that kind of explicit theorization about others' mental states *because* I can't explain or predict their behavior otherwise.

That was the germ of this chapter: a dissonance between my lived experience as autistic and the mainstream explanation of autism as a deficit of social cognition. Now I understand that it was a dated textbook and a dated theory, but I still believe that a description of this condition based on a delay of the development of a theory of mind and its subsequent characterization as a deficit of social cognition are inadequate due to its clashing with both certain empirical facts about people with autism and the phenomenology and lived experience of autistic people themselves. The alternative I propose is twofold: instead of a deficit of social cognition, I will attempt to show that autism is instead a cognitive style of social interaction, whose interactive "failures" are only so because they are framed in the expected response of neurotypical social interactions, in which they are like a fish out of water, and that those interactions are better understood through an interactive theory of social cognition, namely the Second Person Perspective.

I argue that there are two problematic presuppositions of the conceptualization of autism as a deficit: a neurotypical norm as the natural way social interactions happen (a way that the autist fails to comply with) and a biological dysfunction that causes this failure (which has not been found).

To the first issue I bring the weight of my lived experience which, along with those of my acquaintances on the autistic spectrum, while anecdotal, has a degree of objectivity: autistic individuals often use theory of mind when interacting with neurotypical individuals, usually much more often than the other way around, in an attempt to compensate for their lack of implicit understanding of social situations, but, crucially, this is not true for interactions

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between individuals on the spectrum. Rather, these interactions are often perceived as more dynamic and fluid than others. Having similar autistic traits has also been correlated with higher perceived quality of friendship between autistic individuals. Contrariwise, neurotypical individuals have also been shown to have difficulty ascribing mental states to autistic individuals. All these facts seem to imply that the issue here is not one of a lack on the part of the autistic person, but of a mismatch of social expectations that, I propose, is the result of a different cognitive style on the part of autistic people.

The second issue is an issue of demarcation. If autism is a disorder, specifically a deficit in the formation of a theory of mind, then there are two problems: First, given the function/dysfunction dichotomy assumed by the definition of disorder, there is not sufficient evidence that autism is a dysfunctional unless the neurotypical framework is assumed to be "functional". If we do not presuppose a neurotypical framework as functional, then autism is not dysfunctional. Second, there are no stable correlations between autistic symptoms and physiological dysfunctions to which one can point and say, "Look, there's the autism". It's possible that autism does not have the physiological correlation expected of a disorder, and therefore should not be classified as one.

According to these two issues, I propose that autism should not be conceptualized, as it is on the DSM, as a mental disorder of social observation, but instead would be better understood as an alternative cognitive style of social interaction. For this argument, I follow Pérez and Gomila (2021) in their understanding of the Second Person Perspective (SPP) as the basic mechanism through which we understand each other as persons with minds. In contrast with cognitive variants of TOM (the Theory Theory and the Simulation Theory), SPP argues that mindreading is direct and implicit in face-to-face interactions, being a know-how for intersubjective interaction and reciprocal understanding in public spaces, where we can see the emotions of the other in their face.

If we accept that autism is a cognitive style and not a deficit, and accept SPP as a basic mechanism of belief attribution, and we add our earlier point about how autistic people can understand one another more seamlessly than an autistic and a neurotypical person can understand each other, then we can say that it is not the case that autistic people are incapable of using theory of mind, but that they are prepared to understand a different set of gestures, expressions, and avowal expressions than the neurotypical, and therefore there's not a failure on the part of the autistic individual in a social interaction, but a mismatch of social expectations on the part of both.

To finish this chapter, I propose that classical internalist psychiatry lacks the tools to adequately treat autistic people. Given that interventions in psychiatry tend to consider mental illness as brain diseases, and therefore tend to attempt to fix the brain, the fact that there's no stable correlation between autistic behaviors and physiological events means that it'd be better to therapeutically intervene with autistic patients from an externalist point of view, easing their coupling with the world through cognitive scaffolding and the development of affordances similar to those of the neurotypical social mind.

4.2 Autism and Theory of Mind

Human beings are capable of (a sort of) mind reading, both of other minds and (while it may seem obvious) also of our own. If I see a person drinking water, I am led to believe that they are *feeling* thirsty, and I will be correct more often than not. In explaining why I

ordered takeout, I point to the fact that I didn't *want* to cook. When Sherlock Holmes accuses Jefferson Hope of murder, I infer he does so because he *believes* Hope is the murderer. Most of our interactions as human beings with other human beings are made within this framework of being able to attribute psychological states that are, at least on these examples, opaque to public examination. As always, the map is not the territory, but as a first survey of the land we can say that this "mindreading" ability is the ability that neurotypical adults have to explain and predict the behavior of individuals (often other neurotypical adults) with a high degree of success.

Balmaceda (2014) defines folk psychology broadly as "the capacity to predict and explain one's own and others' behavior by means of the attribution of mental states, mainly desires and beliefs". This definition, while succinct, is perfect for our purposes in this chapter, as it encompasses a large range of mental phenomena, both the obvious cases of propositional state attribution and the more subtle cognitive processes that constitute more immediate forms of mental state attribution.

In the cognitivist tradition of the philosophy of mind, though, these latter processes have been mostly ignored. Mainstream views of folk psychology start from the assumption that the mental states of others are opaque and private, which means we cannot have direct access to them, only mediated access. Therefore, folk psychology has been most often described as a theory: what we do to understand what's going on in the heads of other people is to ascribe them intentional states (such as beliefs, desires, and feelings) and infer a behavior from it (in the case of a prediction) or to see a behavior and infer an intentional state from it (in the case of an explanation). This is what is meant when philosophers say we have a "theory of mind" (ToM): that our capability of "mindreading" comes to be through a basic mechanism of intentional state attribution that is inferentially mediated.

Historically, there have been two more or less incompatible characterizations regarding this basic mechanism of inferential attribution:

a The Theory Theory (TT) proposes a third person approach, according to which the predictive and explanatory power of folk psychology can be explained by supposing we have a theory that considers mental states as unobservable theoretical terms, to which we appeal when we need to explain the behavior of an observed third person, and whose meaning is exhausted in their relationship to other terms of that theory (Churchland 1981). In TT terms, when we attribute beliefs to someone, what we do is equate the mental states of the attributee to a system of propositions, which we put in logical relations with certain lawlike generalizations, just like a physical theory equates physical states with numbers to predict visible phenomena. As we grow up, we obtain more knowledge about other people's behavior, and therefore we can build more sophisticated generalizations to refine our theory. The central idea of TT is that since we only have direct (perceptual) access to the behavior of other people, and cognitive states are unobservable, to understand this behavior we must posit the existence of those cognitive states in exactly the same way as a scientist posits, for example, the existence of electrons to explain electrical currents.
b The Simulation Theory (ST) takes a radically different approach. Instead of an objective characterization, ST proposes that the basic mechanism through which we attribute beliefs is based on the privileged access we have to our own mental states (Goldman and Shanton 2010). We reach other people's mental states by simulating them in our own

mind; we simulate having their beliefs and desires and we "run it" through our own decision-making mechanism to see what we would do in that situation, with the goal of creating a prediction of what they would do. This approach commits itself to a first-person standpoint to project mental states to other people, contrary to the TT, which goes the opposite road, from external behavior and the third person to one's own thought. The basic phenomenon that ST attempts to explain is a kind of *empathy*, understood as the capacity to comprehend the actions of others through understanding their position. What exactly this entails is a matter of debate. The kind of simulation we run could be anything from literally imagining ourselves in a different spatial position (high level) to a low-level neural mirroring processes that occur unconsciously and automatically (low level).

Both of these approaches to ToM, however, share the basic precepts of cognitivism, namely that cognitive capacities are best understood in terms of computational procedures that operate on symbolic internal representations. Therefore, intentional state attribution becomes essentially an exercise in theoretical reasoning: we see a behavior and infer from it an internal state that explains it and/or predicts future behavior. This dependence on inferential processes makes both TT and ST susceptible to the same kind of criticism: namely, that they are unable to explain basic forms of social interaction that are (or at least seem to be) much faster, more fluid, and more direct than what an inferentially mediated process would imply. Examples of these kinds of social interactions would be a dancing couple or a pair of workers doing heavy labor, cases in which joint action is possible flawlessly without information-rich processes such as those posited by ST and TT.

Relatedly, in psychology and clinical psychiatry, Autistic Spectrum Disorders (ASD) have been characterized mainly by an impairment of social functions, and therefore described as a disorder of social cognition. More specifically, ASD has been described as a deficit of social communication and interaction, accompanied by restricted and/or repetitive patterns of behavior (DSM-5, 2013, p. 50). This simple definition, however, doesn't tell us what autism *is,* only what it *looks like*. As noted by Bolis and Schilbach (2018), ASD has both a social and a nonsocial component, and explanations of what autism actually is have often focused on either side of this divide. On one side, autistic individuals' difficulty in social cognition has been posited to be caused by a lack of a "theory of mind": autistic individuals can't interact normally with other people because they have difficulties understanding their beliefs and intentions and adequately responding to them (Baron-Cohen 1995, 2003; Baron-Cohen, Leslie, and Frith 1985). On the other side, autism has been described as a detail-oriented cognitive and perceptual style: the "weak central coherence" hypothesis proposes that people with ASD process information locally rather than globally, and therefore perceive the world differently from non-autistic people.

I will argue later that the weak central coherence hypothesis can actually give an explanation not only for the nonsocial aspects of autism, but also for the social ones, but to lay the groundwork for that argument I will first challenge the "defective theory of mind" hypothesis.

The False Belief Task (FBT) has long been considered as empirical evidence of the defective theory of mind hypothesis. Statistically, autistic individuals fail verbal FBT's more frequently and until later ages than non-autistic individuals. This has been taken as indicative of the inability on the part of autistic infants to ascribe beliefs other than their own

until later ages, which has in turn been considered evidence of a deficit in the formation of a theory of mind in autistic infants (Happé 1999).

This paradigm has coincided with a period in which the dominant strategy in psychiatry, what we could call the "biomedical model", was to consider mental disorders as physiological disorders, and to try to establish a correspondence between behavioral symptoms of a disorder and the physiological variations that might cause it. According to the biomedical model the "demarcation problem" of psychiatry (Kingma 2013) is to be solved in a naturalistic manner, appealing to objective categories of function and dysfunction.[1] Regarding autism, I believe the biomedical model faces two challenges: First, on a conceptual level, it cannot be said that autism is a dysfunction unless the functioning of a person with ASD is compared to that of a neurotypical person as "adequate": if we don't presuppose the neurotypical style of interaction (e.g. heavy emphasis on eye contact and facial expressions) then there is no dysfunction of any kind, and it is only when comparing with neurotypical expectations that a dysfunction shows up. In the next section I develop this challenge further through an alternative characterization of autism outside the biomedical model. Second, on a clinical level, the biomedical model has been relatively sterile. Although it allowed considerable progress in investigation regarding mapping of areas of the brain and their relationship with different psychological phenomena, this search for a pathological correlation for autism has not yielded any results for therapeutic intervention, and it's a contentious topic whether autism can even be explained by such a correlation. It has been noted, for example, that some people with autism have heavier brains and a superior neuronal density (Happé 1999), which could reflect a difficulty processing information in a generalized manner, but given that autism isn't diagnosed based on physiological changes but on individuals' voluntary behavior, an essentialization in physiological or natural kind terms seems both undesirable and impossible (Pérez and Ciccia 2019).

4.3 An Alternative: Autism as Cognitive Style

As I have said, one of the most common characterizations of ASD in classic cognitivist psychiatry is the difficulty to ascribe mental states, that the false belief task supposedly reveals. This led to the rise of what could broadly be called "deficit" theories of autism: according to the cognitive model, the person with ASD lacks a psychological resource that could be considered fundamental for intersubjectivity.

However, this thesis is inconsistent with several empirical facts of social interaction that involve people with ASD:

a Observational exercises like the direct false belief test are only informative when they are contrasted against a background of behavioral success, that is, failure to understand deception is only significant if it is accompanied by a failure to deceive (Happé 1999). The issue here lies in that the false belief test is structured in observational terms, while according to SPP we have a solid base to consider that social interaction is not reducible to a third-person interpretive perspective.[2]
b Interpersonal observation exercises often are framed in interactions of the autistic-neurotypical type, that is, situations in which a neurotypical individual interacts with an autistic individual. In such cases, the autistic person is the one who is expected to fit the neurotypical expectation, and so it's their fault that the interaction fails. This ignores

interactions of people within the spectrum, which are perceived as easier and more efficient by those same persons. Furthermore, it has been proven that there is a correlation between the perceived quality of friendship between people with ASD and their relative position in the spectrum (people with autistic traits in common perceived their friendship as of a higher quality) (Bolis et al. 2021).

c Many people with high functioning autism do effectively ascribe explicit mental states to others, usually to a greater extent than their neurotypical counterparts, in an attempt to compensate for their difficulties in interacting (Bolis et al. 2021). This might mean two things: on one side, explicit theorizing of mental states is not the foundation of mindreading, but a resource we (both autistic and allistic people) appeal to when normal interaction doesn't work properly, and on the other side, autism can't be a lack of a theory of mind, since high functioning autistic people seem to have an overdependence on theories of mind.

d On the flip side, Edey et al. (2016) suggest that neurotypical individuals have the same difficulties to ascribe mental states to people with ASD that deficit theories propose people with ASD have, showing that the difficulty of interaction is not unidirectional. It is possible to interpret this as an expressive lack on part of the autist, as Pérez and Gomila (2021) propose, but this doesn't explain the capacity of interaction described in b).

While a) indicates that the false belief task might not be the best lens through which to understand autistic-neurotypical interaction, b) demonstrates that autistic individuals don't have the same difficulty in interaction between them as with neurotypical individuals, meaning that autistic-autistic interactions are more or less successful, c) demonstrates that autistic individuals can develop a theory of mind, and d) exemplifies a reversal of the difficulty of autistic-neurotypical interaction.

In sum, all these situations exemplify ways in which the burden of the interaction failure is not placed on the neurodivergence of one of the participants, but instead on the mismatch of their social expectations. Autistic-neurotypical interactions tend to fail, not only from the neurotypical perspective but also from the autistic perspective, while autistic-autistic interactions (at least while they share a range of autistic traits) seem to have a similar degree of success to neurotypical interactions. Therefore, a characterization of ASD in terms of a social observation deficit resulting from a lack of theory of mind does not seem completely adequate. From this position there is an argument to be made against the entire cognitivist tradition, spanning both ST and TT: if autism as a phenomenon is not well captured by TOM approaches to folk psychology, then perhaps there is more to it than mere propositional attitude attribution.

A recent alternative proposal (Schilbach et al. 2013; Schilbach 2016) has been to stop considering autism as a disorder of social comprehension (meaning, the autist fails in social situations because of an ability to observe them adequately) and start seeing it as a social *interaction* disorder; meaning, to consider the interaction, and not the individual, as the object of study: it's not that the individual fails at interacting, it is the interaction itself that becomes difficult.

This new psychiatric perspective has been facilitated by the development in philosophy of mind of the Second Person Perspective (SPP) (Pérez and Gomila 2021). According to this alternative conception of mindreading, the access one possesses to the mental states of others is not inferential nor explicit (described in terms of content) but direct and implicit. Mental attribution, in this case, is more like a know-how for reciprocal comprehension in

public contexts, in which we can see directly the emotions and intentions of another person. For SPP, paradigmatic cases of intentional attribution are those of reciprocal intersubjectivity, that is to say, cases in which two subjects find each other, ideally face to face, and perceive the expressions of the other as directly meaningful, without conscious interpretation mediating. Following the later Wittgenstein,

> 'We see emotion.'—As opposed to what?–We do not see facial contortions and make inferences from them (like a doctor framing a diagnosis) to joy, grief, boredom. We describe a face immediately as sad, radiant, bored, even when we are unable to give any other description of the features.–Grief, one would like to say, is personified in the face. This belongs to the concept of emotion.
>
> (Wittgenstein 1967)

What this perspective implies is that a social interaction is fundamentally different when seen from the standpoint of an impartial observer (the first or third person) than from a standpoint internal to the interaction itself (the second person). In this latter case, the direct acknowledgement of expressions and the "automatic" coordination of one's conduct with that of a partner renders complex cognitions and inferences unnecessary, facilitating social interaction, while the impossibility of such coordination makes it difficult or straight up impossible. Examples of successful second-person interactions could be a couple dancing, an adult caretaker comforting a preverbal infant, or the mute coordination between two workers doing heavy lifting.

What interests me is not when second-person interactions succeed, but when they "fail", that is to say, the situations in which they do not develop smoothly. As a controlled example, a dancing couple can coordinate their actions with varied degrees of success. I am a terrible dancer, so dancing interactions in which I am involved (which are, thankfully, few) often turn out very clumsy. My intuition is that I fail as a dancer in a similar way in which I fail at social interaction: because I am unable to pick up cues on "what to do next" from my partner.

Contrary to deficit theories of ASD, we can attempt to abandon DSM's diagnostic categories and focus on the social dimension of neurodivergence (Schilbach 2021). A possible alternative comes from the "weak central coherence" hypothesis: according to it, ASDs do not have a social observation deficit, but a cognitive style that affects social interaction. This cognitive style, suggested as a non-social affect deficit (see Happé 1994, 1999 and Frith 1989), is characterized by a favoring of local (over global) processing of information, that is, a favoring of parts and details in detriment to a holistic perspective of meaning apprehension. In contrast with the neurotypical capacity to consider all the information as a *Gestalt* influenced by its context (what we could call a Strong central coherence), weak central coherence attends to the constituent parts in isolation from and independent of context. Having weak central coherence results in the familiar difficulties the autist has in recognizing "social cues" and figurative speech. It also explains autistic children's comparative ease in visuospatial tasks like the Wechsler Block Design Task and the Embedded Figures Test. In ordinary language terms, it could be said that a person on the autistic spectrum "sees the trees for the forest" (Frith 1989, 2009). Note, though, it is sometimes very useful to have detailed knowledge of a single tree. Conceptualizing autism in terms of a "commitment" in attentional economy, with its advantages and disadvantages, allows us to talk about autism

as a cognitive style with a primacy of local processing that is strictly distinct from the primacy of global processing seen in the neurotypical style. Notably, this does not mean people with ASD are incapable of global processing, or that neurotypicals are incapable of local processing; it only means that it is likely that they process information differently by default.

Now, weak central coherence has been mostly discussed as an explanation of the non-social aspects of autism, e.g. repeating patterns of behavior and sensory processing issues. But SPP actually allows us to extend this characterization to its social aspects as well: if mindreading is, as SPP posits, a direct and implicit activity of social interaction, then we not only have an answer as to why autistic people have difficulties interacting with neurotypical people, but also why the opposite is also true, and why autistic people seem to have an easier time interacting with each other as well. Given that a second person approach to mindreading is a perceptual one (as the emotions are "seen" directly, without inference needed) it could be the case that autistic individuals simply do not "see" emotions in the same way as neurotypical individuals do, but have their own cognitive style of social observation that matches with their style of social expression, namely, weak central coherence. In other words, SPP lets us recontextualize social failure as interactive failure.

Based on the notion of cognitive style just expressed, we can then understand ASD not as difficulties for social observation (e.g. recognition of social cues or response expectations) but as a specific style of social interaction, which is perfectly prepared to interact with similar cognitive styles, and then propose that difficulties of interactions of the autistic-neurotypical kind emerge from a social expectation mismatch caused by the friction between cognitive styles. This explanation allows us to account for both the failures of interactions between autistic and neurotypical individuals and the success of interactions between autistic individuals *and* between neurotypical individuals as successful cases of second person interactions, in which a distinct cognitive style triangulates successfully with another cognitive style with which it shares some traits. Explicit attributions of mental states would then be relegated to the space of interactive failure, meaning, to the situations in which a social mismatch (or other factors) interrupts the natural flow of interaction.

From this perspective, then, it is possible to consider autism not as a deficit, but as a different cognitive style characterized by a weak central coherence, meaning, by a favoring of attention to detail in detriment of a holistic perspective. At the same time, considering interactions in this way allows us to shift the responsibility of its failure from the autistic individual to the shared mismatch, which helps destigmatize neurodivergence and promotes a more inclusive framework for autistic-neurotypical interactions: describing mental health issues as social interaction disorders allows us to replace the stigma of "mental illness" with the notion of "difficulty to interact with people that perceive the world differently", allowing for an easier reach for people who would need support.

4.4 Outside of the Head: An Externalist Therapeutical Proposal

However, I consider that just as classic psychiatry is incapable of conceptualizing autism adequately because of its cognitivist assumptions, it's equally incapable of treating it adequately because of its internalist assumptions. If we consider autism as the result of some neurological or neurochemical dysfunction (meaning, if we consider autism a brain disease), then the treatment must follow the guidelines of the biomedical model: alter the physiology or brain chemistry of the subject to correct its biostatistical dysfunction.[3] But, as I have

already shown, such physiological correlation hasn't been proven, and so there hasn't been an adequate psychiatric treatment: it simply looks like there's nothing to treat. Luckily, there are alternatives to this approach. If we deny the internalist assumption of psychiatry (the idea that autism is a specifically cerebral disease) then we can start considering other types of treatment. With this goal in mind, we can now turn to 4E cognition.

4E cognition is a wide field of study in the philosophy of mind that attempts to surpass the perceived limits of classical cognitivism through the revalorization of categories hitherto disregarded by it. 4E approaches to cognition claim that instead of being a functional system of cognitive processes that operate through symbols (meaning, fundamentally, a computer), the mind is:

- Embodied, meaning that the body plays a fundamental and constitutive role in cognition that is not reducible to a mere "hardware". According to most proponents of embodied cognition, the mind cannot be understood as distinct from the body.
- Embedded, meaning that cognitive tasks always develop within a material framework that goes beyond mere computation. In other words, the mind is always situated in the world, and this situatedness allows for enhanced cognitive abilities.
- Extended, meaning that the mind goes beyond the limits of the brain, or even the limits of the body. Extended cognition claims that environmental and social factors are also constitutive of the mind.
- Enactive, meaning that cognition emerges from and is constituted by the dynamic historical coupling between individual and environment. On this view, the mind develops as a sensorimotor faculty of a living body: instead of being "in the brain", the mind is distributed between brain, body, and world.

As we can see, these four strands of what we could call post-cognitivist thought are very closely related. They also all start with an E, which is good marketing. For our purposes in this chapter, the most interesting point about 4E cognition is the externality of the mind: most 4E theorists agree that both the body and the environment shape cognition beyond a mere causal role, whether by enhancing our ability to accomplish cognitive tasks, straight up allowing us to do tasks we would not be able to do otherwise, or even by opening up possibilities of action, affording us the capacity to act in the world in specific manners.

Returning to psychiatry, 4E cognition manifests itself in the form of externalist psychiatry (Davies 2016). According to this alternative to the cognitivist approach, it is possible to conceptualize mental illness as (at least partially) constituted externally, based on environmental or social factors, since contrary to somatic diseases, they depend on complex relations between subject and environment. An externalist could point out external factors linked to PTSD, depression, and addictions (Glackin, Roberts, and Krueger 2021) as constitutive of them, in the strong sense that, if these external factors did not exist, those disorders wouldn't exist either.[4] This article could be considered an argument in favor of an externalist approach regarding ASD, though one made from SPP and not 4E cognition. From a 4E perspective, my analysis could be translated as such: a person with autism is presented with a different set of *affordances* (that is, the possibilities of action that are given to them by the environment) than a neurotypical person, which does not include the common *affordances* of the human social world (Krueger and Maiese 2018). Consequently, because of the difference between cognitive styles, the person with autism *sense-makes*—gives the

world meaning—in a different way from the neurotypical person: while the latter desires to drink water and therefore drinks from their personal glass, the former desires to drink water and drinks from the same glass, without understanding why something like that would be inappropriate.[5]

Hanne de Jaegher (2013) has suggested that from here it is possible to say that people with ASD realize as well a different type of *participatory sense-making,* the kind of *sense-making* that is applied to interpersonal interactions. However, given its embodied and enactive origin, the notion of sense-making is too low-level a concept to be able to explain interpersonal psychological interactions and attributions. I agree with de Jaegher that people with ASD experience the world in a different manner, and that coordination difficulties they have with neurotypical people result from this different experience of the world, but to characterize this difficulty of coordination in terms of participatory sense-making requires a continuous explanation between the biological, cognitive, and interpersonal levels that has not been given (Pérez and Gomila 2021). On the flip side, an explanation in terms of SPP of the interpersonal level that I exposed earlier can effortlessly couple with an explanation in enactive-embodied terms of the personal level. Bypassing this setback, we can finally reach a treatment, or, more likely, a therapeutical intervention that is adequate for ASD, one that is already being practiced by large numbers of parents, teachers, friends, and caretakers of autistic people, but that so far has not yet been adequately systematized (in my opinion, due to a certain reluctance on the part of psychiatry to adopt externalist or social models for its objects of study). This intervention takes many forms, but all of them can be reduced to the externalist mantra: change the environment, not the individual. Instead of disrupting autistic patterns of behavior considered abnormal from the neurotypical perspective, therapeutic intervention should start by acknowledging the roles that these behaviors occupy in the autist's mental ecology, and determine a therapeutic course of action only when a comprehension of these roles is achieved. From this basis, I can foresee a clear way in which an externalist therapeutical approach can improve the quality of life of people with ASD: Similar to the treatment of addictions posited by Glackin, Roberts, and Krueger (2021), therapeutic intervention could be structured around the notion of "cognitive scaffolding", according to which our more complex cognitive processes are supported by modifications we realize in our environment. In the same way an addict modifies their environment to reduce their affordances of substance use, an autistic person (or a caretaker) should be able to modify their environment through "scaffolding" to increase their social affordances, that is, to facilitate states of social interaction in which people with ASD are successful. These scaffoldings, built through a series of developmental interventions, should make possible the creation of new affordances that allow people with ASD to understand[6] the different social situations in which they find themselves and how to act in them.

4.5 Conclusion

In this chapter I developed two criticisms of what I call deficit theories of autism, namely, that they are not an adequate explanation of autism, since they presuppose and predict a series of characteristics that do not fit empirical facts, and that they haven't been useful in clinical practice. On that basis, I proposed that if we accept SPP as ontogenetically primary, it is possible to develop an alternative characterization of autism based on the notion of weak central coherence that recontextualizes the alleged deficits of social cognition of

people with ASD in terms of a joint failure of second person interactions due to the mismatch of social expectations: a different cognitive style entails a different enaction of the world, which carries a different series of social expectations, and with such comes a larger complexity for interaction that doesn't allow for solving in terms of second person attribution, but requires the use of a theory of mind. From this point I proposed that therapeutic interventions in patients with ASD should follow an externalist path, building cognitive scaffolding and facilitating the creation of affordances that allow people with ASD to succeed in the social world, not because they change, but because the world around them accommodates them.

Notes

1 There is considerable debate inside psychiatric naturalism about how to account for the notion of dysfunction. Szasz (1960) proposes a biological dysfunction, Boorse (1975, 1977, 1997) proposes a biostatistical function in regard to a natural kind, and Wakefield (1992a, 1992b) proposes harmful dysfunction to the self or others. However, I consider that in virtue of their naturalism they face the same difficulties.
2 Barone and Gomila (2021) argue that direct false belief tasks are indicative of a "classic" theory of mind that is expressed in propositional terms, while indirect false belief tasks (without verbal components) can be achieved without actually attributing false beliefs. This seems to reinforce the thesis that SPP is ontogenetically previous to inferential theories of mind.
3 This reconstruction might be unfair to the biomedical model, but I consider that accepting an internalist naturalism regarding mental disorders compels one to commit oneself to some version of this conclusion.
4 The example given by Glackin et al. (2021) is addiction: if cocaine did not exist, we couldn't be addicted to cocaine, in the same way that we are not addicted to substances that are not real even though we might have the neuropharmacological disposition to be. A similar argument could be made for, e.g., PTSD: if there were no triggers for PTSD, then no matter what the brain-state of a person was, we couldn't say in any meaningful way that they have PTSD.
5 Here I am replicating an example from Hanne de Jaegher. As a person with ASD, I understand that in certain social contexts this is inappropriate, but I cannot give a better explanation of why.
6 At least rudimentarily, like I understand de Jaegher's glass of water example.

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5

AUTISM AND GENDER

Ruby Hake and Emily Hughes

5.1 Introduction

Autism has been gendered since its inception. A developmental condition originally conceived as a symptom of schizophrenia, autism was first identified in boys who seemed to have difficulties with social engagement and preferred instead to be absorbed in "a world of their own" (Bleuler 1950). Increased recognition around the high levels of gender diversity in autistic populations has led to a renewed focus upon the connection between autism and gender. The last decade in particular has seen a proliferation of attempts at reinforcing, complicating, and undermining the initial association between autism and maleness, revealing a far more complex and heterogeneous relation between autism and gender in the process. That which is often at stake in these debates is the meaning and significance of autistic subjectivity itself and the question of who should be afforded the epistemic privilege of defining it. Further, these discussions have important implications for diagnostic frameworks, and the accessibility of services and care that can support the well-being of all autistic people. They also have implications for how we view gender diversity, and how we handle seemingly mutually exclusive explanatory frameworks in the face of first-person testimonies and rights-based activism.

The aim of this chapter is to critically evaluate the various ways in which the relation between autism and gender has been conceptualized in the extant literature, and to consider what contribution, if any, philosophy might make to current debates. In so doing, this chapter will firstly give a comprehensive account of the prevailing interpretations in psychiatry, psychology, and philosophy. Examining in turn the essentialist and anti-essentialist standpoints, we ultimately identify a detrimental trend toward exclusivity in both. Secondly, we will consider the alternative interpretation of the neurodiversity movement. As we argue, by adhering to a "strategic essentialism" and intersectionality, the neurodiversity movement is able to draw upon autistic lived experience in a way that resists exclusion yet does not claim universal inclusion. This makes it compatible, we argue, with recent developments in critical phenomenology, which might be helpful in bringing the neurodiversity movement's inclusive and intersectional interpretation of autism and gender to bear on mainstream autism research.

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5.2 Essentialist Conceptions of Autism and Gender in Psychiatry and Psychology

Grounded in the medical model, i.e., the view that autism is a developmental disability involving neurological deficits, the relationship between autism and gender in psychiatry and psychology has for the most part been conceptualized according to the essentialist categories of male and female. This has culminated in the "Extreme Male Brain" theory of autism and, more recently, the "Female Autism Phenotype".

5.2.1 Extreme Male Brain Theory of Autism

Since autism was first delineated as a discrete disorder, the defining diagnostic criteria of social and communicative impairments and restricted and repetitive interests have generally been associated with an essentialist conception of maleness. This approach is largely derived from the work of Austrian pediatrician Hans Asperger and Austrian-American psychiatrist Leo Kanner whose paradigmatic case studies from the 1940s argue that autism predominantly affects boys and is characterized by traits that are definitive of a male rather than female cognitive profile (Kanner 1943; Asperger 1944).[1] In analyzing genetic and biological factors in "Autistic psychopathy in childhood", Asperger states that "The autistic personality is an extreme variant of male intelligence" which is defined by strengths in "logical ability, abstraction, precise thinking and formulating, and for independent scientific investigation" (Asperger 1991, 84–85).

Simon Baron-Cohen's more recent "Extreme Male Brain" (EMB) theory of autism (Baron-Cohen 2002; Baron-Cohen et al. 2005) seeks to provide empirical evidence for Asperger's claim that, in autism, the male pattern of intelligence is "exaggerated to the extreme" (Asperger 1991, 85). Implicit here is the presupposition of sexual dimorphism and the idea that the male brain can be defined psychometrically as belonging to those for whom systemizing is better developed than empathizing (Baron-Cohen 2012). By contrast, the female brain refers to those for whom empathizing is better developed than systematizing (Baron-Cohen 2012). Thus, while males are driven toward analyzing, constructing, and predicting inanimate systems, females are by contrast driven toward predicting, identifying, and appropriately responding to the thoughts and feelings of others in the social world.

Following Asperger, Baron-Cohen suggests that autism can be understood as an extreme instantiation of the systemizing male brain evident, for example, in a preference for rule-based, structured, factual information, a tendency toward the collection and organization of objects, or an obsession with complex closed systems such as weather patterns or machinery. In these cases, "systemizing is hyper-developed whereas empathizing is hypodeveloped", meaning that while "they might be talented systemizers…they can be 'mindblind'" in the sense that they lack the ability to interpret the thoughts, emotions, beliefs, and actions of others (Baron-Cohen 1997; 2002, 249). Mapped onto the diagnostic criteria, while the hyper-development of systemizing reinforces the restricted and repetitive interests, the hypo-development of empathy is implicated in social and communicative impairment.

Despite its predominance, the EMB theory and its assumptions that male and female brains differ at a biological level and that autism is more prevalent in males has been subject to critique (Bumiller 2008; Krahn and Fenton 2012; Sample 2013; Nadler et al. 2019; Ridley 2019). In particular, critics argue that EMB theory focuses only on those with an average or above-average IQ and thereby excludes a large number of autistic people; overemphasizes

the causal connection between fetal testosterone levels and autism; overlooks the heterogeneity of autism and the fact that its etiology remains unknown; and fails to accommodate other (potentially more typically female) phenomena that commonly co-occur with autism such as sensory hyper-sensitivity or repetitive behaviors (Sample 2013, 93). Taking up this last point, a number of critics of the EMB theory have argued that the male-bias of the of the diagnostic criteria for autism may be resulting in the un-, under-, and mis-diagnosis of autistic girls and women, who may differ from boys and men in their capacity to camouflage their autistic traits, particularly as they pertain to social and communicative impairments (Gould and Ashton-Smith 2011; Lockwood et al. 2021). In an attempt to counter this male bias, research has considered whether autism may in fact present with different symptomology in girls and women, leading some theorists to posit the contrasting idea of a "Female Autism Phenotype" (Bargiela, Steward, and Mandy 2016; Milner et al. 2019; Hull, Petrides, and Mandy 2020).

5.2.2 Female Autism Phenotype

A counterpoint to the EMB theory of autism, which assumes an essentialist conception of maleness, the Female Autism Phenotype (FAP) assumes an essentialist conception of femaleness. As with EMB theory, FAP presupposes sexual dimorphism and the idea that there is a biological distinction between male and female. However, the FAP challenges the idea that autism is necessarily more prevalent in males by suggesting that autistic traits such as social and communicative difficulties and restricted and repetitive interests present *qualitatively differently* in females than they do in males.

While research into the FAP is at a preliminary stage, there is compelling reason to suggest a presentation of autism that does not conform to the EMB theory and the idea that autism is necessarily an extreme instantiation of the male cognitive profile. In their narrative review of the evidence base for the FAP, Hull, Petrides, and Mandy (2020) suggest firstly that the FAP may present with differences in social relationships such that, while autistic females may suffer fewer social impairments than autistic males, they may find it harder to maintain longer term friendships and find it harder to cope with social conflict. Secondly, they argue that the FAP may present with differences in restricted and repetitive interests in the sense that, while the intensity of the interest may be abnormal in both autistic males and females, the interests of autistic females themselves may be more relational. These interests may include animals, fictional characters, or psychology, and thus may not be considered unusual in contrast to the typical interests of autistic males. Thirdly, they note that there is good reason to suggest that the FAP may tend toward the internalization rather than externalization of symptoms, as manifest in frequently co-occurring conditions such as depression, anxiety, eating disorders, and self-harm. Fourthly, they argue that the FAP may present through camouflaging behaviors, in which autistic women use conscious and unconscious strategies to minimize autistic characteristics in a social setting.

5.2.3 Critiquing the EMB Theory and the FAP

The development of the FAP has done much to challenge the intrinsic maleness of autism and opened up critical new possibilities for recognizing the harmful neglect of autistic

women and understanding their unique lived experiences. Nevertheless, like the EMB theory, the FAP is grounded in the medical model and presupposes an essentialist biological distinction between maleness and femaleness that unequivocally fails to accommodate the gender diversity of autistic people. Interestingly, research in psychiatry and psychology has increasingly come to recognize a high association between gender dysphoria or gender incongruence and autism (Coleman-Smith et al. 2020; Cooper et al. 2023). However, there is a tendency in this literature to see trans autistic men as further legitimizing EMB theory and the essential maleness of autism (Jones et al. 2012; Nobili et al. 2018; Murphy et al. 2020), while excluding non-binary autistic people and trans autistic women. Further, while case-studies of autistic women are frequently used to legitimize the idea of a FAP, it is often not clear whether these women identify as being cis-, trans, or non-binary and thus to what extent they do in fact conform to, and identify with, being female (see for example Kanfiszer, Davies, and Collins 2017; Kourti and MacLeod 2018; Milner et al. 2019). Autistic lived experiences both overtly defy and subtly subvert the essentialist categories of gender that the medical model has established to define them.

Indeed, outside the medical model, it is widely recognized in autistic communities that many autistic people do not identify with stereotypical representations of gender and struggle to conform to the socio-cultural norms of masculinity and femininity (Bumiller 2008; Davidson and Tamas 2016; Kanfiszer, Davies, and Collins 2017; Kourti and MacLeod 2018). Resistance to definitions of autism informed by essentialist gender norms has given rise to *anti*-essentialist conceptions of autism and gender that, reinforced by the social model of disability (Dyck and Russell 2020, 174), understand essentialist conceptions of gender as social constructs that are imposed onto autistic people from without.

5.3 Anti-Essentialist Conceptions of Autism and Gender

Dichotomously opposed to the essentialist approach, anti-essentialist interpretations of autism and gender have worked to illuminate the ways in which gender essentialism can create damaging patriarchal, heteronormative and cisnormative hierarchies that actively discriminate against non-conforming autistic people. Emphasizing that it is autistic people themselves who often *reveal* the violence of rigid gender norms (Moore et al. 2022, 3), the anti-essentialist literature follows and takes seriously the assumption that "most autistic people do not see gender as an internal or external category that is important or even applicable, especially to themselves" (Prince-Hughes 2004, 59). In so doing, anti-essentialist interpretations have opened up possibilities for new conceptions of gender and of autism, using frameworks that are completely removed from any deficit view (see Jackson-Perry 2020). This work makes a crucial contribution to understandings of autism and gender. One immediate concern, however, is that while anti-essentialist interpretations have exposed the fact that essentialist views of autism and gender do exclude many or even most autistic people and inflict significant harm as a result, there are a significant number of trans autistic people who do see their gender as binary, innate, and important to them (Adams and Liang 2020; Sparrow 2020; Purkis and Lawson 2021). These people are often excluded by anti-essentialist accounts of gender and autism (Adams and Liang 2020; Sparrow 2020; Purkis and Lawson 2021). The dichotomy between essentialist and anti-essentialist conceptions of autism and gender thus gives rise to a problematic *mutual exclusivity* whereby autistic people with binary genders *and* those with non-binary genders are seen to be incommensurate

within any one explanatory framework. This limitation is evident across many of the prevailing ideas in the anti-essentialist literature on autism and gender.

5.3.1 The Idea of Autistic Gender as Performance/Appearance or Non-Existent

Informed by Judith Butler's important critique of essentialism given in *Gender Trouble* (Butler 1990), the idea that autistic gender is performative or a "mere appearance" is pervasive in the anti-essentialist literature. For example, in "Gender Copia: Feminist Rhetorical Perspectives on an Autistic Concept of Sex/Gender" (2012), Jack argues that "[f]or autistic individuals, gender may constitute a performance in a rather literal sense" (Jack 2012, 10). Similarly, Atkinson, in his thesis "Autism Entangled: Controversies over Disability, Sexuality, and Gender in Contemporary Culture" (2021), relies solely on a view of gender as mere appearance/performance. He holds that gender can *only* ever "*appear*" to be, "innate" or "inherent" (Atkinson 2021, 50–1). A related idea pervasive in the anti-essentialist literature is that gender does not exist at all. For example, in "'I don't feel like a gender I feel like myself': Autistic individuals raised as girls exploring gender identity" (2018) Kourti and MacLeod work to disentangle autistic subjectivity from a fluid and unfixed conception of autistic gender (Kourti and MacLeod 2018, 4). While this separation is common among "assigned female at birth" (AFAB) autistics, it does not account for the experiences of some trans men, including one of the participants in the study, who experience their gender identity in essentialist terms: "I am a man in a female body" (Kourti and MacLeod 2018, 4). A more explicit example of this theme is given in "Gender Copia" (Jack 2012) where the author includes "male-to-female transsexuals" in the category "non-gendered" lifestyles (Jack 2012, 5). In "Autism and the ghost of gender" (2016), Davidson and Tamas describe autistic people as revealing gender to be a "ghost". They write: "[m]ore literal minded than most, many [autistics] describe meticulous attempts to seek out and solidify gender's troubling manifestations in their social worlds, only to find, of course, that no such thing as gender exists" (Davidson and Tamas 2016, 59). Far from being a fixed category, therefore, they suggest that gender is rather an unreal and amorphous apparition. They write "autistic accounts reveal [gender] to be there, but not really; something that slips in and out of their awareness, that's felt to circulate around but never quite settle in their lives, or on their bodies" (Davidson and Tamas 2016, 61). The definitiveness of their account suggests a firmly anti-essentialist and non-binary-validating stance.

The issue with this is that while there is compelling evidence to suggest that for many autistic people gender is a performance, mere appearance, or a ghost, there is comparable equally important evidence to suggest that for some trans autistic people, gender is experienced as essential, innate, and fixed, and these people are not featured or accounted for in the above literature (Sparrow 2020; Purkis and Lawson 2021). For example, there are people who talk about going through bodily transition in order for their body to reflect "the *soul* it houses" (our emphasis), and that soul is "female" [or male] (Sparrow 2020, 25). Others talk of the significance of full gender transition, not necessarily medical, but feeling able to fully *be* and not just *perform* "woman" or "man", and for some this being is based in very clear and fixed ideas of what women and men are. For example, wanting to "accomplish as binary a [gender] transition as possible" (Adams and Liang 2020, 75), and wanting "to look like a complete female" (Strang et al. 2018, 4047). Thus, in the anti-essentialist literature, the idea that gender is performance/appearance or non-existent is often presented

as if that is all gender can be, and thus excludes some autistic people, reducing autistic experience to just one category of gender expression.

5.3.2 The Idea of an "Essentialism Paradox" at the Intersection of Autism and Gender

Another idea that is inadvertently operative in the anti-essentialist literature is that of an "essentialism paradox" (Goodley 2016) where, even when adopting the social model of disability, and thus the idea that disability is a social construct, it is possible to essentialize autism (Goodley 2016; Moore et al. 2022, 14). Applying this idea to gender more specifically, Moore and colleagues (2022) argue that even when adopting an anti-essentialist view of *gender,* it is possible to essentialize *autism* in problematic ways (Moore et al. 2022). According to their systematic literature review in "The intersection of autism and gender in the negotiation of identity", Moore and colleagues (2022) state that "in the reviewed studies, where participants questioned gender norms, this did not extend to critique of autism as a label…as one identity (gender) became seen to be fluid, the other (autism) solidified" (Moore et al. 2022, 16). This is an interesting point and a trend that may well apply to the anti-essentialist studies that the authors review. Still, it is not clear how "not questioning the label of autism" and the category becoming "*more solid*" are equatable, only that the category of autism *retains*, rather than *gains*, some solidity. Further, it is not clear whether the label of autism is being bracketed from critique in the studies that Moore and colleagues are reviewing, and therefore whether the participants—who were featured because of their *gender* variance, not autistic variance—were minded to critically engage with the category of autism. This lack of questioning could also be due to autism being treated as a general category *in contrast* to the category of "neurotypical", which may not preclude its intrinsic variance.[2] Further, we should be careful in applying this to the autistic trans literature as a whole, given that there are numerous studies that interrogate the essentialism of both autism and gender (see Adams and Liang 2020, 45; Davidson and Tamas 2016, 63; Sparrow 2020, 16; Walker and Raymaker 2021, 9).

Despite being mutually opposed in many respects, our view is that in their various iterations both the essentialist *and* anti-essentialist paradigms conform to a detrimental trend toward exclusivity. At the forefront of much contemporary debate in this area, the question arises as to whether and to what extent the neurodiversity movement can be seen to allow for a more inclusive interpretation of autism and gender, which understands the relation as being irreducible to either the essentialist or anti-essentialist paradigms.

5.4 The Neurodiversity Movement's Conception of Autism and Gender

The anti-essentialist conception of autism is associated with the view that autism is not a disorder or a deficit, but rather a distinctive neurological profile that differs from the perceived norm. Understood as such, autism is one form of "neurodivergence" within the spectrum of "neurodiversity", a term created by autistic activist communities in the mid-late 1990s (Botha et al. 2024). The "Neurodiversity Movement" (NM) is a civil rights movement fighting for neurodivergent people's rights. It rejects the medical and deficiency model of autism and in this sense rejects essentialism (Chapman 2020; Chapman and Carel 2022). At the same time, however, the NM has been accused of essentializing autism through a form of neurocentrism (Goodley 2016; Moore et al. 2022; Murray et al. 2023, 221). In this section we will briefly discuss the NM's relationship with neurocentrism and essentialism more generally before

discussing its relationship with *gendered* essentialism/anti-essentialism. As we will explore, the NM appears to largely (if not completely) avoid the essentialism paradox, while managing to also circumvent the mutual exclusivity regarding which genders it can account for in its view, i.e. it accommodates or at least attempts to accommodate all gender identities.

5.4.1 The NM and the Essentialism Paradox

Since the inception of the NM, it has been common to describe neurodiversity as diversity among "brains", rather than "ways of being" or some non-neurocentric equivalent. This is perhaps understandable given the neurocentric paradigm in which the movement began (Walker and Raymaker 2021, 6). Viewing one's neurodivergence as one's brain being "wired differently" to most people, rather than one's brain being deficient or abnormal, is a profoundly validating shift in perspective (Jack 2012, 9; Purkis and Lawson 2021, 29; Sparrow 2020, 37). However, as neurodiversity activist Nick Walker argues, this neurocentric idea is essentialist and reductive because it assumes that the brain is *the* site of autism, ignoring the extent to which autism is realized elsewhere in the body too (Walker and Raymaker 2021, 6). Walker argues, along with an increasing number of philosophers of mind, that it would be more accurate and therefore more useful to speak of the *mind* or "bodymind" when describing autistic cognition, rather than just the brain (Roberts, Krueger, and Glackin 2019; Walker and Raymaker 2021, 6). One can argue that embodiment and one's relationship to one's environment, felt through the body, plays a crucial and co-constitutive role in autism—autism is experienced and diagnosed based on observable behavior and interaction with people and places, it is not diagnosed via brain scans (Russell 2020, 172). Indeed, attempts to find brain differences that are consistently associated with autism have been far from successful (Gernsbacher 2015; King et al. 2019; Botha and Gillespie-Lynch 2022, 96). Furthermore, as Walker argues, this shift away from focusing on the brain alone in neurodiversity studies should be easy, given that the prefix "neuro" does not actually mean "brain", it means "nerve". In this sense: "the neuro in neurodiversity is most usefully understood as a convenient shorthand for the functionality of the whole bodymind and the way the nervous system weaves together cognition and embodiment" (Walker and Raymaker 2021, 6). Unhelpfully, "neurocentrism" refers to brains, not nerves. Nonetheless, this move away from neurocentrism helps us understand the "impairments" of autism better, and see that they are not innate, not essential to the autistic person; they are created by and in situations with *external* phenomena, people and places who do not understand the differing needs and preferences of the autistic person in front of them (Roberts, Krueger, and Glackin 2019; Krueger 2021).

Importantly, when the NM employs essentialist language of neurocentrism, it should not be presumed that the movement itself or the people in the movement adhere to this essentialism, nor that this language is being used unknowingly. According to Ellis (2023), the NM employs *strategic essentialism*, i.e. "the intentional, and often temporary, appropriation of select aspects of essentialist narratives by a marginalized group for political purposes" (Ellis 2023, 226). Indeed, "Sometimes, activists say things that don't fully match up with their underlying theoretical views because they need to appeal to existing narratives about autism, or because they want to build solidarity within the Autistic community" (Ellis 2023, 226). This becomes necessary because being heard and helped in the relevant spaces often means speaking in the terms by which that space is structured, and often this is the medical model. Thus, "Neurodiversity activists find ourselves walking a tightrope between essentialism and

illegibility" (Ellis 2023, 230). In this sense, the NM can be seen to resist Goodley's essentialism paradox: Goodley asserts that in the NM, by citing neurological difference as what makes us diverse, "medicalizing discourses become the all-encompassing narrative", i.e. the medical model and its essentialism comes back into frame, which contradicts the goal of the NM (Goodley 2016, 152). Ellis and Walker demonstrate how a medicalizing discourse has not become the "all-encompassing" narrative of the NM: the adoption of essentialist language is *partial*, meaning only some advocates adopt it (Walker 2021; Ellis 2023). It is *temporary,* meaning it is likely to fall out of favor given that it is not a core belief of the movement itself, and there are several NM activists arguing against its usage (Ellis 2023). Furthermore, it is *appropriating* rather than accepting the medical model's language, meaning it creates something new by using this language in tandem with anti-essentialist beliefs (which are not absorbed by the essentialist language) (Ellis 2023, 226).

But what about the more complex essentialism paradox posited by Moore and colleagues, whereby an anti-essentialist view of *gender* can involve/lead to an essentialist view of autism? Does the NM manage to avoid this?

5.4.2 Gendered Essentialism Paradox and NM's Gender Inclusivity

While there has been minimal critical engagement with the NM's views of gender, we can glean some insight from accounts within the NM literature itself, often in popular-press book form (see Sparrow 2020; Purkis and Lawson 2021) or online video and social media form (see Ygender 2018; Green 2023; Rivera 2023). One thing that becomes immediately apparent is that several NM activists are also trans rights activists and are often trans themselves (see: Lydia X. Z. Brown, Alyssa Hillary Zisk, Nick Walker, Wenn Lawson, Yenn Purkis, Lyric Rivera, and Ember Green to name a few). Critically, the NM manages to be much more inclusive than the anti-essentialist literature on autism and gender. While the approach is clearly opposed to essentialism with a capital E, the majority of the movement nevertheless strives to accept all genders, including those that are conceptualized in binary or essentialist terms (Purkis and Lawson 2021, 23–5; Sparrow 2020, 11; Botha & Gillespie-Lynch 2022, 106; Stimpunks 2022; Green 2023). To our mind, this "strategic essentialism" avoids the constraints of the essentialist paradox through a more fundamental commitment to both neuro- and gender diversity: "Members of the neurodiversity movement adopt a position of diversity that encompasses a kaleidoscope of identities that intersects with the LGBTQIA+ kaleidoscope by recognizing neurodivergent traits…as natural variations of cognition, motivations, and patterns of behavior within the human species" (Stimpunks 2022).

The NM's theme of "queerness", specifically "neuro-queerness", is also important in demonstrating the NM's opposition to essentialism and its commitment to inclusivity. Walker conceived of the concept "neuroqueer" as a verb first and foremost; to neuroqueer is to "subvert, disrupt, and deviate from the embodied performance of being neurocognitively 'normal'", i.e. to not mask/camouflage one's autistic traits, which may include stimming and avoiding eye contact more than neurotypicals do, etc. (Walker and Raymaker 2021, 9). It is also an identity label: to *be* neuroqueer is to be both neurodivergent and queer (i.e. not heterosexual/cis), and to "embody" and express "one's neurodivergence in ways that also queer one's performance of gender, sexuality, ethnicity, and/or other aspects of one's identity" (Walker 2021). This view that autism and gender are intricately interconnected seems to be common in the NM literature (Walker and Raymaker 2021, 9; Pyne 2021, 352).

Another widespread example of the NM's view of autism and gender's interconnectedness is the concept of "autigender", which captures the idea that gender is heavily influenced by and inseparable from autism, but that not every autistic person or even every autistic trans person will relate to it (Rivera 2023; Laube 2023). It allows room for autistic people who feel their gender is not necessarily "autistic" or is separate from their autism, and more akin to non-autistic experiences of gender (Rivera 2021; Laube 2023). One can argue that this view that autism and gender are deeply connected is in itself opposed to the essentialism of the medical model, as the latter often tries "to separate (and dismiss or deny) inter-relations of autism and gender" (Botha and Gillespie-Lynch 2022, 106). This is observable in the fact that gender queerness is often dismissed by medical professionals as being a mere symptom of someone's autism rather than an important aspect of someone's autistic lived experience (Robdale 2018).

5.4.3 The NM and "True" Inclusivity and Intersectionality

Still, some have argued that the NM has not yet gone far enough in its gender inclusivity, nor in its intersectionality, i.e. it does not sufficiently appreciate nor reflect the extent to which multiple marginalized identities intersect and compound discrimination (Crenshaw 1989; Botha and Gillespie-Lynch 2022). The concept and act of neuroqueering is not as widespread in the NM as Walker has hoped, and there are corners of the NM that certainly embrace a kind of gender essentialism that excludes trans people. For example, Singer, who has declared herself the founder of the NM, explicitly does not accept trans women as women, and continues to defend numerous transphobic statements: "if you're bioMale, you can't call yourself a woman"; "trans women are not women" etc.[3] (Singer 2017; Engelby 2024). Singer seems to embrace a stance of biological essentialism as to how sex and gender interact: if you have a penis, you are a man, she argues,[4] though she does not hold that if you have a vagina you are a woman, as she accepts trans men as men[5] (Engelby 2024). This inconsistency in her essentialist position is interesting, as it throws into question whether we can call it essentialism at all. Countless NM activists have spoken out against her actions, and she is certainly in a minority within the NM (Byrne 2024). Perhaps Singer is informed by and accepting of a level of neuro-essentialism and therefore finds (selective) gendered biological essentialism to be harmonious with it. It is telling that this move is made by so few NM members, though—we are certainly not talking about an essentialist slippery slope. Singer's view is not compatible with neuroqueerness or intersectionality more broadly [despite conceiving of neurodiversity as a kind of "intersectionality" (Doyle 2021)], and this not only limits her iteration of neurodiversity but renders it self-defeating—how can neurodiversity embrace the intersections of neurodivergent experience while rejecting and invalidating some of them?

Akin with Walker's assertion that heteronormativity and neurotypicality are inseparable (Walker and Raymaker 2021, 9), Botha and Gillespie-Lynch state that: "You cannot challenge neuronormativity without working to undo cisheteronormativity" (Botha and Gillespie-Lynch 2022, 107). By ignoring the effects of cisheteronormativity on neuronormativity—the experience of being neurodivergent *and* trans, for example—one inadvertently upholds neuronormative oppression, by diminishing the subjectivity of the autistic person, and expecting them to put aside some of their queerness (Botha and Gillespie-Lynch 2022, 107). So, though the NM manages to embrace intersectionality and inclusivity to a large

extent, it can and must employ greater intersectionality in order to include, honor, and liberate *all* neurodivergent people (especially autistic people of color and autistic people who are additionally disabled, such as being unable to access the online communities where much of the NM exists (Botha and Gillespie-Lynch 2022, 95). In closing, we want to consider to what extent the philosophical discipline of critical phenomenology might collaborate with the NM in supporting this move toward greater intersectionality and inclusivity.

5.5 A Critical Phenomenology of Autism and Gender

As the philosophical discipline concerned with understanding the meaning and significance of embodied lived experience, phenomenology is theoretically well positioned to give insight into the significance of autistic experience, particularly when these insights are informed by inclusive, participatory research created with and by autistic people. Phenomenology is also concerned with understanding the structures that make lived experience possible. Understood according to the critical phenomenological framework developed from the work of Merleau-Ponty, de Beauvoir, and Fanon, this entails understanding the way in which lived experience is always situated within social, cultural, and political norms and subject to intersecting inequalities, for example, racial, gender, and disability. Very much aligned with the NM's aims to queer neurotypicality, therefore, critical phenomenology aims to "*queer* phenomenology" (Ahmed 2006) by taking seriously the intersectionality of lived experience.

Understood as such, a critical phenomenology of autism and gender could provide a systematic interpretive framework through which to gather thick descriptions of autistic people and their embodied, lived experiences of gender (see Køster and Fernandez 2021; Hughes, Ekdahl, and Boldsen 2025). At its most inclusive, the NM considers that neurodivergent people's individual gender identities should never be questioned or invalidated by others, and never be "up for grabs" as it were, i.e. not sites of philosophical or political exploitation, where they can be cherry picked by researchers who want to make a particular argument or represent autism or gender in a particular exclusive way. Simultaneously, critical phenomenology could provide theoretical tools through which to further illuminate and interrogate the social, cultural, and political constructs of autism and gender that condition and make possible these experiences (Weiss, Murphy, and Salamon 2020). At its most intersectional, NM considers that individual identities are constant sites for *critical* engagement, meaning they are acknowledged as part of a web of intersectional experience involving power struggles, political discrimination, and identity creation (Walker and Raymaker 2021; Botha and Gillespie-Lynch 2022; Ellis 2023), despite being beyond *critique*. Though this may seem like a paradox, it is a fruitful and important tension, much like the NM's relationship between strategic essentialism and being anti-medical model essentialism.

Consistent with the aims of the NM, therefore, our view is that critical phenomenology reinforces the irreducibility of autism and gender to either an essentialist or anti-essentialist standpoint because of its commitment to including diverse individual experiences, while simultaneously understanding the broader intersectional conditions from which they emerge. Critical phenomenology would also enable a platform that could help bridge the gap between NM and mainstream autism science, bringing the movement into funded research, something which has been lacking for decades (Purkis and Lawson 2021). Taken further, our view is that a critical phenomenology of autism and gender could support the NM as it engages in "a

material practice of 'restructuring the world' in order to generate new and liberatory possibilities for meaningful experience and existence" (Guenther 2020, 15). As Lisa Guenther writes:

> As a political practice, critical phenomenology is a struggle for liberation from the structures that privilege, naturalize and normalize certain experiences of the world whilst marginalizing, pathologizing, and discrediting others. These structures exist on many levels: social, political, economic, psychological, epistemological, and even ontological… As a transformative political practice, critical phenomenology must go beyond a description of oppression, developing concrete strategies for dismantling oppressive structures and creating or amplifying different, less oppressive, and more liberatory ways of Being-in-the-world
>
> *(Guenther 2020, 15–16).*

Working in collaboration, it is our view that critical phenomenology and the NM could mobilize a transformative political practice that could create new and liberatory ways of being in the world. While there has been some critical phenomenological engagement with autism (see Boldsen 2018, 2022; Fernandez 2020; Krueger 2021; Hughes, Ekdahl, and Boldsen 2025), there has not yet been any critical phenomenology of autism and gender, let alone any work that engages with autistic people. In imagining what this work might look like, we argue that research like Dinah Murray and colleagues' "The Human Spectrum: A Phenomenological Enquiry within Neurodiversity" is a useful comparison and inspiration (Murray et al. 2023). This project was a "shared participatory phenomenological self-investigation" created between autistic and non-autistic researchers, the first of its kind, in which lived experiences across the autistic/non-autistic divide were analyzed. It is research that is rooted in the NM and its goals, and provides novel insights that point to some crucial ways the field of autism studies has been erroneously conceiving of autistic experience (Murray et al. 2023). While this work is broadly phenomenological, it is not *critical* phenomenology, and intersectionality does not feature. Thus, we call for work like this that is focused on the intersectionality of autism and gender, that is created by autistic people of all genders, that resists the mutual exclusivity by which much of the literature is defined, and is thus irreducible to either the essentialist or the anti-essentialist conception of autism and gender.

Notes

1 In the 1920s the Russian child psychiatrist Grunya Sukhareva suggested that autism affects both boys and girls and that it can present differently in girls, however her ground-breaking work has only recently been brought to light outside of Russia (Sukhareva 2020).
2 Thank you to Jami L. Anderson for bringing this point to our attention.
3 According to Walker, who is transfeminine, Singer referred to her and Chapman, who is nonbinary, as "boys" and accused them of "trying to tear down a woman scholar because we were sexist." Singer confirmed what she has said about Walker and Chapman's gender in an email to The 19th. "It's true that Nick Walker looks like a man, sounds like a man, so it is clear that he is biologically male. Thus as I keep saying that people who want to identify as other than male, need to get creative and find some other word" (Byrne 2024).
4 She has said "Men and women are not the same…Men tend to be more aggressive. They have to come up with their own name. They are not women. Now, I'm not talking about people who are intersex. That's a whole other story. I'm talking about people with a penis. Straight as that" (Engelby 2024).
5 "I have no problem with trans males, some of my best friends really are" (Engelby 2024).

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6

AUTISM, CARE, AND THE LIMITS OF DESTIGMATIZATION

Quinn Hiroshi Gibson and Sarah Arnaud

6.1 Introduction

Over the past two decades, common ideas about autism have shifted considerably. In particular, an older paradigm according to which autism is conceived primarily as a pathology has begun to give way to an alternative paradigm which recognizes it as a social identity. This shift has largely occurred due to the concerted efforts of activists, notably activists within the neurodiversity (ND) movement, who have been promoting the destigmatization of autism and the inclusion of autistic people in autism-related research and discourse. Clearly, such activists are taking not only a theoretical, but a *political* stance, and as with any such stance, the ND movement has generated opposition.

Some political disagreements can be understood as arising from a simple opposition of interests. But one thing that is striking about the backlash to the ND movement is that opponents do not typically reject the calls for inclusion and recognition which are hallmarks of the movement, at least not directly and explicitly. Instead, they often attack the theoretical basis on which such calls allegedly rest. One strand of opposition is even nominally explicit in *welcoming* the calls for inclusion and recognition but rests on doubts about whether ND has correctly identified the means we should take to reach those goals, or worries about the unintended but potentially negative knock-on effects of pursuing them.

We identify the following strands in this backlash:

1 The imputation to the ND movement of the assumption that autism is not harmful to autistic people, or the "not harmful" (NH) strand.
2 The claim that following the prescriptions of the ND movement will obscure the scientific reality of autism, or the "obscuring science" (OS) strand.
3 The claim that following the prescriptions of the ND movement will cause autistic people to lose access to therapeutic care, social concern, accommodations, or help, or the "loss of help" (LH) strand.
4 The claim that following the prescriptions of the ND movement will lead to overdiagnoses of autism and a subsequent dilution of the clinical and social significance of autism, or the "overdiagnosis and dilution" (OD) strand.

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In this chapter, we aim to analyze these reactions in turn to demonstrate that they rest on misapprehensions about the ND movement. In broad strokes, we think that the best response to (1)–(4) is to clarify just what the ND movement is asking for and what the theoretical basis of such demands is—and is not.

All the same, we do think that there is a serious concern in the neighborhood, one which is less often recognized. In particular, we think that there are limits to what can be accomplished under the banner of destigmatization, and that there is an inherent risk that the ND movement could be "captured" by the elite[1] or embraced merely for the purpose of virtue signaling. The response which we offer to this worry also rests, in part, on clarifying the movement, but will require us to say a little more, which we think will also cast light on the ways in which the strands of backlash rest on misapprehensions.

The aim of this chapter, therefore, is both to clarify what we take to be some of the mistaken criticisms of the ND movement, to identify a closely connected but previously underappreciated worry, and to offer a partial response to that worry.

6.2 The Backlash

In this section, we will discuss the strands of backlash in greater detail and offer our responses to them.

The NH and OS strands can be considered the theoretical basis for the more practical LH and OD strands. Indeed, some critics of the ND movement explicitly link these claims, for instance: "a conception of neurodiversity that denies real disabilities or characterizes them as merely social is likely to deprive some people of the support and resources that they need" (Hughes 2021, 57). According to such critics, practical consequences concerning support would follow from the theoretical claims about harm: "[o]pposition to [medical and behavioral] interventions is linked to the idea that interventions aimed at curing or preventing a condition are only appropriate where that condition is a disorder or disease, and are unnecessary for conditions that are not intrinsically harmful" (Hughes 2021, 49). Consequently, it is worth asking: Do the demands of ND activists really rest on theoretically dubious grounds? First, we will consider NH and LH, which are commonly associated. Would following the prescriptions of the ND movement cause autistic people to lose access to therapeutic care, social concern, or accommodations? Does the movement involve denying that autism is harmful? Do the claims to reformed care, concern, and accommodations rest on claims of harm? Then, we will consider OS and OD, which are commonly associated. Is the ND movement guilty of obscuring the scientific reality of autism? Is there any associated risk of overdiagnosis?

6.2.1 Harm and the Basis of Care

As we have noted, the ND movement in general has as its main goal the depathologization and acceptance of autism. This is normally taken to mean that instead of being considered a disorder or other harmful condition needing a cure, autism should be considered a "difference". It is in this connection, for instance, that activists have asked for a shift of focus toward the recognition of the development of autistic cultures and their positive impact on well-being (Sinclair 1993, 2010).

One thing that might be thought to follow from this is that therapeutic interventions that aim at "correcting" autistic behaviors, brains, or identities, should cease. This apparent

consequence is what has generated much opposition. Those in opposition to such clinical reforms claim that discouraging therapeutic intervention denies opportunities for improved quality of life to those who could stand to benefit from them (Russell 2020). This view is often expressed by concerned parents of autistic children (Rothstein 2012; Leadbitter et al. 2021).

As a preliminary, note that in a trivial way, taking the suggestion that certain therapeutic and clinical interventions should cease *would* involve autistic people losing access to certain forms of care, if we consider the interventions in question to be forms of care. But whether such interventions are appropriate forms of care or forms of care at all is precisely what is in dispute. So the question here cannot be settled by simply pointing to the fact that some of what had been done would no longer be done if the requested reforms took place; that amounts to nothing more than the trivial observation that reforms are being asked for.[2]

A more charitable understanding of the objection has it not baldly stating an opposition to a proposed reform, but, as above, attacking the reform's alleged theoretical basis. On this way of construing the objection, the objector interprets ND activists as *denying* that autism is harmful as the basis for the assertion that certain therapeutic forms should be reformed or abolished. So, let us confront the objection in this form: Do ND activists deny that autism is harmful? Must they do so in order to advocate for the proposed reforms?

We wish to make three different responses to this line of objection. The first is just (a) to deny that the movement rejects the claim that aspects of autism can be harmful or distressful. The second is (b) to deny that the kind of care advocated for needs to rest on a recognition of harm to be legitimate. And the third, which both stands alone and underlies the other two, is (c) to point out that it is hardly relevant to claim that *unreformed* or traditional forms of care might become unavailable, when the whole point is to reform the types of care—and the theoretical framing of the nature and basis of that care—on offer.

Perhaps the most basic response is (a): the movement does not reject the idea that aspects of autism can be harmful. For one thing, as critics are wont to point out, such a claim would be facially very difficult to maintain. Consider, for instance, Denis Forest, a prominent critic of the ND movement: "the wide disparities within the autistic spectrum and […] the vulnerability and disabilities that are the consequences of severe autism […] make […] medical research as important as it has ever been" (Forest 2021, 443). According to him, only a "narrow view of neurodiversity—high functioning autism is an instance of normal variation"—is "reasonable" (443). In other words, Forest seems to be saying, it would *obviously* be unreasonable to promote a view that considers all types of autism as involving no harm because of the mere existence of "severe" cases of autism (which, in turn, demonstrate the aptness of the medical model).

We return to the problematic notion of severity below. For now, it suffices to note that Forest is here just assuming that the ND movement denies that autism is harmful, sees that that would be very difficult to maintain, and then imputes a version of the distinction between severe and high-functioning autism to the movement. This is done in order to save the ND position from his imputation to it of an implausible assumption.

A far simpler interpretation of the ND movement is available, viz., that it does not deny that aspects of autism can be harmful. There is then no need to invoke a problematic distinction such as that between severe and high-functioning autism (to which, again, we return below) in order to "save" it from facial implausibility. One thing that can be striking about the ND movement's harshest critics is that the position they are criticizing often

bears only a faint resemblance to what, we contend, the movement is really about. We think this merits invoking a very simple principle of interpretive charity: if interpreting one's opponents in some way makes their claims facially indefensible, charity demand that perhaps one's construal of the position be reexamined.

Of course, pointing out that it would be unreasonable or nearly indefensible for activists within the ND movement to say something does not *decisively* show that they are not, in fact, saying it. But there are plenty of other reasons for thinking it would be a gross distortion of the ND movement to interpret it in this way.

Before proceeding, a number of preliminary distinctions between kinds of harm will be helpful. One might claim that a certain harm is *intrinsic* to a certain condition, i.e., that the condition is harmful *in itself*. For instance, two major intrinsic harms of tuberculosis are chest pain and persistent cough. Such harms are not relational in the sense that they are not dependent on institutions or practices, or on the ideas about tuberculosis which happen to be in circulation in a given locale; nor would anything be left out of their description if we limited ourselves to describing the state of the subject's body. Intrinsic harms contrast with *extrinsic* harms, harms which *are* relational. Because there are many different possible harmful relations, there are many varieties of extrinsic harm. For instance, harms may be suffered by the subject as the result of abusive medicalization (which we could call "therapeutic harm") or as the result of stigmatization, bigotry, or isolation (which we could call "social harm").[3]

It is central to the claims of the ND movement that members of neurominorities *do* suffer harms, e.g., certain therapeutic harms associated with the abusive medicalization of autistic people, which was still common up until the 1990s. In a recent piece written toward the end of her life, the linguist, writer, and activist Dinah Murray, who was also autistic, discusses alternative approaches to wrongful treatments by advocating for a shift toward practices that are informed by the actual needs of autistic people (Murray 2020). It would be absurd for someone to occupy Murray's position and simultaneously deny that those with autism thereby suffer any harms. Indeed, Murray explicitly recognizes this alongside the importance of care for well-being, denouncing "the harms being done to vulnerable people in the name of care" (Murray 2020, 54).

The ND movement also recognizes social harms. Indeed, it is a major contention of the movement that many of the central concepts used to classify and describe the autistic experience should be carefully attended to and potentially revised. For instance, it has been argued that the traditional notion of "deficit" should be replaced with "challenge" and that "difficulty", and "problem behavior" be reconceptualized as "distressed behavior" (Dwyer et al. 2022). Crucially, these new terms do not attempt to sanitize the experience of autism of all harms (*distressed* behavior) but are being used to factor out what aspect of the relevant harm is a social harm. Distressed behavior is distressing intrinsically; distressed behavior conceptualized as problem behavior, or so the thought goes, encodes a social harm.

Unsurprisingly, social harm is a major focus of the ND movement, and ND activists claim that much of the harm suffered by autistic people stems from currently enforced societal norms that do not accommodate neurodivergence. Catala, Faucher, and Poirier (2021) introduce the concept of "neuronormativity", to refer to this phenomenon wherein the social norms that implicitly favor neurotypical ways of behaving or feeling result in the marginalization of neurodivergent ones. So, true acceptance of neurodiversity would involve undermining or challenging these norms, and a major part of the point of doing so is

to reduce the harms that they cause, which necessarily involves acknowledging such harms in the first place.

The harms described by Murray, and those which are downstream of neuronormativity, are extrinsic to autism. But it is just as plausible that such harms ground the claim that clinical and therapeutic practice ought to be reformed as it is that other harms ground that claim, since neuronormativity penetrates those practices as much as it does other aspects of social life. Although we see no reason to attribute to the ND movement the strikingly strong claim that no aspect of autism is intrinsically harmful, even if that claim is rejected, basing one's case for clinical and therapeutic reform on the harms caused by the neuronormative penetration of current clinical and therapeutic practice should be more than enough to undermine any accusation that such claims are supposed to involve the *denial* of harm.

Could the ND movement be correctly interpreted as denying that autism is intrinsically harmful? From what we observe, the question of whether autism is intrinsically harmful is not settled within the movement. However, this is unsurprising. To settle it would be as difficult as trying to determine whether there would be a residue of harm attendant upon any given disability following the complete elimination of ableism. Not only is such a counterfactual difficult to evaluate, this is more or less the core of the disagreement between proponents of radical and moderate versions of the social model of disability. Insofar as each position is defensible, we should not expect this question to be easily settled.

In any case, the opponents of the ND movement are not entitled to interpret the movement as being committed to the claim that all the harms of autism are extrinsic if the movement is itself non-committal on this question. And we hope to have shown, there is no plausibility to the claim that the ND movement denies outright that harms are suffered by autistic people in virtue of their autism.

A more radical response is also available here. Not only is it false that the ND movement denies that autism is harmful, it is also false that harm is the only possible ground for claims to care and support. (This is what we called (b), above.) This is understood by the movement. For instance, Steven Kapp notes that those involved in modifying the category of autism in the DSM acknowledge that while support needs vary among autistic people, the notion of "severity" can be misleading.

> Autistic people also tend to gain skills across our lifespans (APA 2013), and the same activists parents might claim as unlike their child may have presented more severely as children. For example, Sinclair, the main "father" of the neurodiversity movement through their work with Autism Network International […], noted of ANI co-founders "we had all fit descriptions of "low functioning" autistic people when we were younger." All had speech delays as children, such as the onset of semi-reliable independent speech at age 12 for Sinclair, yet their access to speech and functioning continued to vary in daily life as adults.
>
> (Kapp 2020a, 309)

Degrees of severity are not fixed. They vary over time and do not correspond to a "type" of autism. Moreover, if we consider severity merely in terms of harm or distress, we encounter substantial conceptual issues. For instance, is an autistic person with distressful OCD or intellectual disability more "severely" autistic because their condition appears more harmful? Alternatively, could someone without such conditions also be considered more severely

autistic simply because their autism is perceived as more straightforward or "pure"? This perspective reveals a critical flaw: using harm as a measure of severity risks oversimplifying the diverse experiences of autistic people, failing to account for the complexities and varying trajectories of their lives. Thus, the concept of severity, if correlated solely with the level of harm or distress, proves inadequate for assessing the need for therapeutic care. The argument for a harm-based assessment of severity undermines the dynamic nature of autism and ignores the broader context of person's life.

The idea is that autistic people may need various supports, but that there is no *a priori* connection between "degree" of autism and the degree of care warranted. To say this is to sever the link between harm and care that is assumed to obtain by opponents.

A central feature of ND discourse is the demand to recognize neurodiversity as a form of human variation to be respected—and dealt with clinically, therapeutically, socially, when necessary—rather than eliminated. This can, of course, be seen, causally and historically, as a response to the extrinsic harms—perhaps especially certain therapeutic harms—of autism. Recognizing and respecting autism as a form of human variation would likely reduce such extrinsic harms, especially given that, historically, forced medicalization has had precisely the goal of eliminating autism.[4] But the connection here between the historical harms of forced medicalization and the call for respect is causal and historical, not morally determinative. The perpetration of such harms throws into sharp relief some of the harms consequent on failures of recognition and respect, but the call for recognition and respect does not in any morally significant way *rest on* the perpetration of the harms. For instance, if someone is mistreated as a racialized other and then claims that the perpetrator of that harm failed to recognize and respect her, she is invoking a claim to recognition and respect against the perpetrator of the harm; the harm does not bring such a claim into existence or give it its basic moral significance.

The sort of respect and recognition that is being asked for by the ND is closely connected to being seen and met as one is. This is what Chapman and Botha (2023) are getting at when they suggest prioritizing personal narratives to ensure that therapeutic interventions align with the actual needs and well-being of autistic people, rather than attempting to force them to conform to neuronormative standards. These "actual needs" will likely differ between people, depending on what makes them seek therapy in the first place. Efficient care, therapeutic or not, has to respond to genuine requirements and preferences of people,[5] rather than imposed expectations or assumptions about what they should need. Chapman and Botha recognize that autism can be the subject of clinical encounters and therapy; what they denounce are the traumatic effects of some behavioral interventions. This message is also conveyed by the artistic work of Jody O'Neill, an autistic screenwriter and actress who, in her play, denounces the forceful conversion of autistic behaviors into "normal" ones, for example by constraining and discouraging stimming practices or forcing eye contact (O'Neill 2021). What this shows is that whatever form of clinical, therapeutic, or other support is provided, it should be done against the bedrock claim that variation be respected rather than eliminated.[6] As far we can tell, this claim itself is seldom the target of objectors.

According to ND activists, because the currently existing practices and institutions of care do not adequately embody the called-for kinds of recognition and respect, the regimes of care that they provide are inadequate. *This* is what fundamentally underlies the claims for therapeutic and clinical reform. The kind of care that would be provided after neurodiverse conditions have been depathologized may well be very different. In this light, it is rather missing the

point for opponents to claim that currently available regimes of care may become unavailable, since when it comes down to it, causing precisely that to happen *is* the entire point. This is the third line of reply (c) we said we would pursue earlier: given the goal of depathologization of the ND movement, traditional forms of care *should* become unavailable and be replaced by new ones. It underlies the previous two: no one need deny that subjects are harmed through their autism because a large part of the relevant harm is due to the inadequate current regime of care and neuronormativity; and moreover, these inadequacies themselves are the basis for the claims to reform, regardless of the harms they may or may not (but which they in fact likely do) cause, not any claim about the intrinsic nature of autism.

Claiming that opponents are missing the point by lamenting that the very regimes of care revealed by the ND movement to be inadequate will be lost not only underlies our previous two responses, it also stands alone. All radical critiques share this property and are liable to being misunderstood in light of it. They fundamentally reimagine some practice, institution, or social arrangement in response to difficulties which, they claim, can only be addressed by reform that goes to the root. In response, moderates or conservatives play their characteristic role, defending the arrangement or cautioning moderate or incrementalist reform instead. But the radical critique has simply not been addressed if the moderate or conservative response is based simply on the assertion that the radical proposal would involve the loss of the status quo. The substantive disagreement concerns whether the radical diagnosis—that only going for the root is adequate to the challenges at hand—is correct, and that diagnosis is not questioned by the bare assertion that radical change is being called for.

It is understandable for those who have the interests of autistic people at heart and who perceive that the current regime of care is not, for someone close to them, a *net negative*, to worry that any movement away from the current regime could result in a loss of care for those autistic people. That loss is always a notional possibility when change is being considered. But a proper understanding of ND demands should go a long way to allaying such a worry. Insofar as the worry rests on the idea that ND activists are denying that aspects of autism can be harmful, or the companion idea that harm is the only legitimate base for claims to care, we hope to have defused them. Further, productive engagement with the radical nature of the demands of the ND movement requires acknowledgement that it is precisely asking for the regime of care to be reformed. A failure to see this, or to presuppose its unworkability, is either a failure to engage in good faith, or verges on being question-begging.

6.2.2 The Scientific Reality of Autism and Diagnostic Prevalence

Another line of criticism faced by the ND movement pertains to the empirical nature of autism and, relatedly, its diagnostic prevalence. It corresponds to the theoretical assumption, which we called "obscuring science" (OS), that interpreting autism through a political lens would compromise the integrity of the sciences which investigate it and obscure its empirical nature. This criticism manifests in two contrasting concerns: one according to which an activist-led, rather than a science-led, understanding of autism is committed to a problematic kind of reductionism which, hemmed-in by activism, leads to autism being too narrowly construed and another, nearly the mirror image which we earlier labeled as "overdiagnosis and dilution" (OD), according to which an activist-led understanding of autism would lead to it being understood too *broadly* and hence would lead to overdiagnosis.

The first of these concerns accuses the ND movement of promoting a too narrow brain-based understanding of autism, viewed as "biological reductionism" (Russell 2020). This may at first seem surprising. How often is it that the science-minded find themselves throwing accusations of biological reductionism at political activists? Yet here is Forest, addressing what he takes to be a prominent tendency in the early ND movement:

> According to [Judy Singer], neglecting the "neurological underpinnings" of autism and attempting to correct it were two concurrent mistakes. On the contrary [according to her], it is necessary to defend autistic identity, but it is also essential to acknowledge its undeniable neurological basis, as it is natural and the result of atypical developmental trajectories.
>
> (Forest 2022, 238, our translation)

And why, one might wonder, is this a problem?

> I propose that neurodiversity is far from illustrating something like the omnipotence of neurosciences when it comes to defining people, or the neurobiologization of the subject. This notion shows that the neurosciences provide material or a convenient lexicon rather than a framework or a form for the representation of autism. Advocates of neurodiversity haven't really "interacted" with the neurosciences: they have minimally drawn from it what could illustrate, with some rearrangements and a good dose of idealization, what they were already convinced of.
>
> (Forest 2022, our translation)

The idea seems to be: it is the ND activists who are placing too much faith in the neurosciences "when it comes to defining people" and activists have sheltered themselves under the status of certain sciences while using them as instruments to buttress the conclusions they had already reached by non-scientific means and to push forward their agenda.

This is mostly interesting for historical and dialectical reasons. It is not terribly plausible that the ND movement, in its current form (as we will see below), is vulnerable to this objection. Indeed, a movement that made such claims could be accused of being a kind of reductionism, of overlooking social and environmental influences, and of committing to an indefensibly sharp distinction between science and non-science. Nevertheless, it may be understandable that some activists thought it was necessary to prosecute their case in such terms, given the historical context. For instance, Russell notes that such an approach has served to counter outdated and damaging theories such as the "refrigerator mother" hypothesis about autism and has been useful in allowing autistic people access to resources. Kapp even thinks that it keeps countering damages today. He argues:

> [B]rain-based explanations facilitate the movement's compatibility with alliances with non-autistic parents. They reject a role in caregiving for causing autism, absolving parents of the responsibility scientists and clinicians assign[ed] to them when Freudian psychogenic theories have dominated (as they still do in France and to a lesser extent in countries such as Brazil).
>
> (Kapp 2020b, 6)

Still, we should be careful here. It may not be wise to allow theorizing to be driven by pragmatic exigencies. For instance, it may have been true—and may even still be true now—that an effective cultural counter to a dangerous moral model of addiction, according to which behavior in addiction is thought unproblematically to be the product of morally criticizable choice is to cleave closely to a brain-disease model, which is understood to be in explicit opposition. But that is simply not enough to show that such a brain disease model is accurate.[7]

In the present context, we don't need to attempt to settle whether some degree of biological reductionism about autism is defensible. What is important is that it is no longer plausible to attribute thoroughgoing reductionism to the ND movement. Presently, most ND activists fully acknowledge the complexity of autism and advocate for a broader social model that integrates environmental and societal factors, moving away from a strictly biomedical interpretation (Chapman 2020). Whether this means the movement is availing itself of the *extra-scientific* is a difficult question which depends on how one construes the boundaries of science, but it is certainly worth noting that some philosophers have argued against a narrow focus on the sciences of genetics and neuroscience in the study of autism, but also for the claim that social conceptions of and political commitments with respect to autism have corrected biased scientific practices and understandings, thereby contributing to increases in scientific validity (Arnaud 2023).[8]

So, while we believe that the debate has moved past this earlier phase, that does not mean the controversy is over. Indeed, is it now much more common to hear things that indicate the pendulum has swung too far the other way. In response to ND activists clarifying their anti-reductionism, opponents have begun to express the mirror-image concern: if autism is framed within the context of identity politics, its characterization may fall into the hands of non-experts, and diagnosis may shift from clinical settings to self-identification, with the associated fear of too many false positives or a rash of "overdiagnosis". This worry has been amplified through traditional and social media, where one routinely finds claims that we are living through an "autism epidemic".

At bottom, we think that such a media-based panic reflects precisely the stigmatizing attitudes against differences and minorities that many autistic activists and researchers have condemned. It is easy to see that the worry of an "epidemic" illustrates a fear of "too many" autistic people rather than a genuine concern for scientific validity. The fear of an epidemic has no empirical basis, and rising incidence rates, such as they are, are better explained with reference to an improved understanding of the various manifestations of autism (Gernsbacher, Dawson, and Goldsmith 2005; Isaksen et al. 2013) and successful efforts toward destigmatization (Bennett et al. 2018). Yet, concerns about overdiagnosis and false positive self-identification remain.

Here, some proponents of the ND movement take a firm stance: they argue that autism should be understood as a social category rather than a medical one, and so the reality of the category should be understood in terms of the political coherence of a constituency; however, they also emphasize that this does not make it any less real (Chapman 2020). While we remain agnostic about the possibility of autism being so thoroughly socially constructed, we agree with the latter: autism is real *even if* it is only a social or political category, as one might plausibly say about gender categories or categories of sexual identity. Thought of in this way, it becomes harder to see why there should be any connection between self-diagnosis and *false* positivity. Adopting the ND framework indeed has consequences for how we should think about diagnosis as it makes self-identification a diagnostically more significant step than

previous paradigms. But it is precisely this paradigm shift that undercuts any reason to think of such moves as illegitimate.

The historical and dialectical move from worrying about reductionism to worrying about overdiagnosis highlights a significant contradiction within the opposition to the ND movement. On one hand, the concern of an overly narrow scientific focus is associated with the possibility of excluding genuine cases and denying support and recognition to some people. On the other hand, the fear of broadening the conceptualization of autism raises concerns about overdiagnosis and the potential dilution of diagnostic significance, which could impact the distribution of resources. Both are expressed under the banner of scientific legitimacy, but they pull against each other. In historical and dialectical context, it can be seen how they emerge, but we believe both have been addressed.

6.3 Elite Capture and Virtue Signaling

While we think all of the criticisms we have entertained so far can be shown to rest on misunderstandings of the ND movement, they reflect a concern about representation which cannot be dispatched in the same way. We now turn to that worry. Looking ahead, while we believe that part of this heretofore unaddressed concern can be answered, it leaves behind a worrisome enough residue to warrant careful consideration as the ND movement goes forward.

Any large-scale political movement will face the challenge of how best to represent the concerns of its constituency in pressing its demands and the demand for destigmatization itself has limits. The ND movement highlights these joint challenges. It focuses on a population stigmatized and excluded for neurocognitive differences, but that group is internally diverse. Moreover, within the neurodivergent community, many do not play a direct role in the ND movement. Some autistic people, for example, do not use spoken language, and accommodations allowing them to be heard are not necessarily provided. Others belong to other identity-significant neurodivergent or minority groups, and their status as such may not be fully represented by the movement. As not all autistic people participate in shaping the demands of the ND movement, those more adept at socially dominant forms of communication are more likely to gravitate toward the roles of spokespersons and decision-makers, potentially overshadowing the voices and needs of others.

One might put this by saying that the ND movement is especially vulnerable to *elite capture* (Táíwò 2022). In general, elite capture is what happens "when the advantaged few steer resources and institutions that could serve the many toward their own narrower interests and aims" (Táíwò 2022, 22). In this context, it is worth noting that elite capture can have both within-group and between-group manifestations. The within-group manifestation is what happens when the interests of a privileged subgroup dominate the interests of the larger group. The between-group manifestation is what happens when elites in the broader society neutralize demands for justice by assimilating them to a form which is compatible with their own elite interests. Neither requires that anyone, elite or otherwise, *intend* for group interests to be so captured.

We believe that while the ND movement has the internal resources to deal with some of the risk of within-group elite capture, some of the between-group manifestations present a risk for care-providing. In this section, we show how the within-group manifestations might be addressed, and how to address *some* of the between-group manifestations. In the next section, we will discuss the most concerning sources of the risk of between-group elite capture.

6.3.1 Within-Group Manifestations of Elite Capture

Those with greater facility in social communication who gravitate to leadership positions within the movement can easily, just in virtue of being those who speak on behalf of those who do not, come to represent the movement as a whole. Their interests need not effectively represent those of the heterogeneous constituency on behalf of which they speak. This is the feature that causes a vulnerability to *within-group* elite capture.

Although this worry is not always distinguished from those discussed above, we think it is importantly different. Indeed, it may even be what is implicitly driving the backlash, even if those who are so moved are unaware of it. For instance, in a piece mainly about how the autistic community stands to benefit from the continued classification of autism as a psychiatric pathology (nominally connecting (NH) "not harmful" and "loss of help" (LH), above), Kansen (2017) says:

> [ND activists] don't see autism as a disorder. They see it as a normal cognitive variation associated with a unique set of strengths and weaknesses. They think autism should be removed from the *Diagnostic and Statistical Manual of Mental Disorders*, just as homosexuality was in the 1970s. As an autistic person, I respect the movement. I do. I'm thrilled to see our community having a voice. But I think there's a lot that they're missing. First off, many of us aren't high-functioning enough to benefit from depathologizing autism. The neurodiversity movement doesn't have much to say about lower-functioning autistics, who are decidedly less inspirational.

Mitchell (2019) is more explicit about the worry of elite capture (though he doesn't call it that):

> Many of those in the neurodiversity gang claim to be autistic and to speak for others on the spectrum. They use what a friend of mine called "the royal we". They state "we" don't want to be cured—as if we all feel the same way. But in fact they are very different from the majority of autistics. Many on the spectrum can't speak or use a computer. They can't argue against "neurodiversity" because they can't articulate their position. They're too disabled, you might say.

There are a number of questionable presuppositions expressed here, but setting them aside, we nevertheless think there is also something worthy of consideration. There *are* differences in the degrees to which those represented by the ND movement are able to communicate *in the dominant modalities* through which contemporary social movements are defined and through which they prosecute their missions. It is because of this that the movement is vulnerable to within-group elite capture.

6.3.2 Between-Group Manifestations of Elite Capture

The feature which causes a vulnerability to *between-group* elite capture is that demands for destigmatization lend themselves to relatively easy neutralization by elites in the broader society. Of course, this does not mean that the demands are trivial. It means that it is much easier to *appear* to satisfy them than it is to *in fact* satisfy them and this fact can be exploited

by those outside the movement simply acting in their own interests. This presents a practical limit to what can be accomplished under destigmatization's banner.

To see in a preliminary way how this vulnerability to between-group elite capture manifests, one need only consider recent media depictions of autistic people. Some authors have advised caution about the "glamourization" of autism in the media that portrays autistic people as heroic savants (Maich 2014). They recommend "careful choice-making and in-depth critique […] to develop an authentic understanding" (110). While potentially contributing to some destigmatizing attitudes toward autism, such representation offers an incomplete picture of autism which can be taken up into the broader culture in problematic ways.

We do not believe the glamourization mentioned above should be attributed to the ND movement, nor is it entirely problematic. Instead, it can be seen as a consequence of the reduction in stigmatizing attitudes toward autism that the movement has helped to foster. This shift could have contributed to more positive representations of autistic people in the media, reflecting broader societal changes in how autism is perceived. Of course, one rather obvious problem with such representations is their failure to capture the diverse manifestations of autism, but there is a sense in which the emergence of such depiction is a bottom-up rather than top-down phenomenon: glamourizing autism in the media and depicting autistic heroes caters to the broader desire to have role models from various social and political groups.

We should not expect the media to teach us about autism. With traditional media, it is almost a truism to say that distorted or sensationalized portrayals are the norm and these serve not only the function of grabbing attention but also, as we have seen, the function of neutralizing political demands. There is thus considerable truth to the idea that the media responds to market incentives and that the sensationalizing and neutralizing of political moves for economic purposes is to be expected. On the other hand, *merely* criticizing media portrayals of autism on the grounds that they are inaccurate and profit-driven overlooks the potential positive impacts such representations can have on public perceptions and inclusivity, i.e., on pursuing destigmatization.

While we think issues of cultural representation are important, the tendency to focus narrowly on them risks doing none other than facilitating elite capture. Indeed, this parallels how radical demands from diverse quarters have been neutralized and commodified by mass culture and elite interests quite generally. One very effective strategy employed by elites for neutralizing radical demands across diverse quarters is to culturalize them, i.e., to transform them into symbolic demands stripped of as much material import as possible. Sometimes, cultural victories are themselves significant, as when the demand is itself for a kind of recognition and attitudinal change—same-sex marriage equality, and the ever-increasing general acceptance of same-sex couples in broader society, for instance, are not trivial achievements. But by contrast it is difficult to count a movement such as Black Lives Matter and its associated "racial reckoning" as a success by material standards. Its biggest legacy appears to be the rise of HR-led DEI initiatives designed to diversify boardrooms and sanitize corporate images. Meanwhile, meaningful police reform has been minimal—certainly, nothing has been "abolished". Moreover, the racial wealth gap and differential arrest and incarceration rates remain as high as ever, and the general conditions of a highly racialized working population have not improved.

Often when this dynamic plays out, certain key figures emerge to facilitate between-group elite capture by serving as liaisons between the movement and the broader culture. Consider Robin DiAngelo, the once-beloved (at least among some segments of the political left) and now (nearly universally) pilloried author of *White Fragility*. Although *White Fragility*

was written before the 2020 murder of George Floyd, in the ensuing protests, DiAngelo became the darling of the white liberal establishment because she represented a version of the problem of racial injustice which could be digested by elite interests: racism is perpetuated by forces internal to the guilty white psyche which are ultimately insurmountable. The solution? An interminable parade of anti-bias workshops, consultancies, and speeches, in which audiences are admonished, catechism-like, to "do the work"—which can never be completed!—of confronting their own complicity in racial injustice.[9]

It doesn't matter much whether DiAngelo herself was cynically distorting a more radical message or whether the elite establishment was simply able to make her into a "useful idiot". Her functional role in this dynamic became one of facilitating elite capture. Our concern is whether this dynamic could be playing out in the space between the ND movement and broader society. Might figures emerge DiAngelo-like who either cynically exploit the destigmatizing messaging of the ND movement or unwittingly serve to neutralize it?

Even without the facilitation of a cynic or a useful idiot, destigmatization itself is relatively easily assimilable by elite interests because its greatest victories tend to be culturally encapsulated. For this reason, there just appear to be limits to what can be accomplished under the banner of destigmatization alone. We think this is only exacerbated in the current information ecosystem whose very currency is superficial attention and easily memeable cultural signifiers. If anything is an anti-meme, it is a demanding call for genuine material change.

Social networks and social media can also elevate the risk of between-group elite capture in a less obvious way by causing well-meaning people outside of the movement to misunderstand the movement's demands and to contribute to their trivialization by repeating them in neutered, culturalized form. Sometimes, this is virtue signaling: once culturalized, those in the broader culture, "allies", engage with the movement primarily using easily shared and reproduced memes. They express values, opinions, and moral judgments mainly and primarily to demonstrate good moral character or to signal membership in a social group whose (at least superficial) adherence to a certain moral principle is a marker of belonging. This has a tendency to preclude taking meaningful action because it focuses on the appearance of support rather than substantial, effective contributions to the movement's goals thus undermining genuine caring. As a result, the movement's demands risk being—and eventually, cynically, *being seen as*—superficial trends rather than serious calls for change. Elite capture and virtue signaling are thus connected in this context. And we acknowledge that when combined, they present risks for care-providing. In the following section, we explore this in more detail.

6.4 Care Ethics and the Limits of Destigmatization

While we have argued that the most widely discussed and influential instantiations of the strands of backlash again the ND movement get the movement they are criticizing wrong (not least of all because the "theoretical" worries NH ("not harmful") and OS ("obstructing science") do not accurately represent the ND movement), it is possible that the worry about the limits of destigmatization just identified is lurking under the surface somewhere in the backlash. We propose to understand the problem in the following terms: both forms of elite capture run the risk of important failures in care-providing.

We do not intend presently to survey the entire field of care ethics but we think some prominent ideas from that field can help to show more concretely the ethical ramifications of elite capture and virtue signaling in the ND movement.

The ethics of care has been developed as an alternative to traditional ethical frameworks, which are mostly based on principles of autonomy and general moral rules. Instead, it emphasizes the centrality of relationships and the complexity of particular moral situations. According to Carol Gilligan, who developed this framework, a proper ethical theory must recognize that people are interdependent (Gilligan 1982). The ethics of care gives moral significance to the concern we show in our actions, and to caregiving activities. Because caring has to do with recognizing the specificity of people's needs, providing efficient care cannot occur without a genuine understanding of the needs of its recipients. For a recipient of care to benefit from the care provided, their specific needs must be heard, taken into account, and respected. This has several implications for autism and the ND movement.

First, the pathologization of autism is a non-starter in such a framework. This aligns with the demands of the ND movement to depathologize and respect variations rather than medicalize them. Even if it is done with an intention of benefiting someone, any goal of "curing autism" by non-autistic people would be a form of coercion that goes against the principles of care ethics, as it does not respect a relational dynamic. Secondly, the ethics of care emphasizes listening to and valuing the perspectives of those directly concerned. When elites dominate the conversation, the true needs and concerns of the neurodiverse community may be overlooked or misrepresented. To see more precisely how the ethics of care is compromised by elite capture, let us revisit the two manifestations of elite capture. While we think, in principle, that the ND is vulnerable to both forms of elite capture, we claim it either rarely occurs within-group, or the harm has already been done, and is not directly attributable to the ND movement. Whichever it is, a significant risk remains from between-group elite capture, when the elite that captures the movement consists of people who are not autistic. Here is why.

We believe the interests and aims of the potential "elite" in the movement are not necessarily "narrower" than those of many autistic people who do not advocate within the movement. As Sinclair's testimony shows (quoted by Kapp, see section 6.2), autistic people who use verbal language and navigate according to social expectations (the so-called high-functioning) have not always been verbal or met these social expectations, and their language skills and ways of functioning in society still vary greatly in adulthood. This means that while some autistic people could be considered the "elite" in virtue of being high-functioning, they are not consistently so. However, those who are typically considered "low-functioning" are never considered as elite; and, given recent diagnostic changes are often excluded outright from being recognized as autistic,[10] having been reclassified from "classic autistic" to "severely intellectually impaired".

Indeed, this shift suggests that elite capture may have already taken place within-group, effectively erasing many autistic people from autism. As a result, the category "autistic" would now primarily designate people who would have been labeled "high-functioning" a decade or two ago, and it would increasingly designate a smaller portion of autistic people. If this is the case, within-group elite capture has occurred in subtle ways, contributing perniciously to the "looping effect" within the category of autism envisioned by Hacking.[11] An inaccurate representation could then result in practices that do not reflect the needs of many autistic people (notably those who are no longer considered autistic), thereby failing to provide efficient care and support. But this is not a *direct* consequence of the ND movement, it rather results from a resistance to apply its principles of inclusion and depathologization to people with intellectual impairments. We think elite capture is a direct consequence of the ND movement when it is associated with virtue signaling. In our view, this association

might be influencing the backlash through what we consider legitimate fears that the movement's authenticity is being compromised.

In fact, elite capture as a direct result of the ND movement is more likely to manifest between groups, when the elite is comprised of members from the dominant group, for a number of reasons. Firstly, the potential for "virtue signaling" is greater: allyship in political movements is an easily commodified form of social capital and can be wielded to burnish one's social credentials, to signal in-group membership, or even simply to gain popularity (Wellman 2022). Secondly, even when the intentions of allies are to provide help and care, their actions can be perceived as virtue signaling by members of marginalized groups. This perception can lead to a counterproductive outcome: what power the allies have managed to accrue which is nominally supposed to be put to use in forwarding the movement comes to be considered untrustworthy by the members of the non-elite group (Knowlton, Carton, and Grant 2022).

How does all of this bear on the ethics of care? To explore this question, we consider the framework of care-ethics as defined by Joan Tronto (1998).

In Tronto's view, care is a set of actions and activities—caring for children, parents, friends, by feeding, caring for, accompanying them, etc.—but it is also a disposition, a way of *being* while performing these activities. It requires doing them while *genuinely* having concern for the other person, their needs, their well-being. Simply going through the motions is not enough. One must act with genuine attentiveness to the other person's needs, feelings, and unique characteristics. Without this attentiveness and disposition, one might fail to identify the needs of the other person, risking giving them inadequate care.

Tronto mentions four phases of caring:

1 Caring about: the recognition in the first place that care is necessary. It involves noting the existence of a need and making an assessment that this need should be met.
2 Taking care of: involves assuming some responsibility for the identified need and determining how to respond to it. Rather than simply focusing on the need of the other person, taking care of involves the recognition that one can act to address these unmet needs.
3 Care-giving: involves the direct meeting of needs for care. It involves physical work, and almost always requires that care-givers come in contact with the objects of care.
4 Care-receiving: recognizes that the object of care will respond to the care it receives. For example, the patient feels better, or the starving children seem healthier. It's a way to make sure care has been provided.

First, virtue signaling seems to be flatly incompatible with the dispositional and genuineness aspects of care as Tronto understands them, because those acting to show their moral virtue might not be disposed to act when obstacles are in the way or when situations require them to set aside their own interests; and part of genuineness is being attentive to a person's unique characteristics and needs, which is not only particularly relevant in the case of autism given its heterogeneity, but is unlikely to be realized by someone with a virtue-signaler's motivations.

We also think between-group elite capture and its associated virtue signaling are relevant across the four stages of care:

1 Caring about: virtue signaling can distort the initial recognition of needs. When elite groups use care as a means to enhance their own image rather than out of genuine

concern, the actual needs may be misunderstood or misrepresented, leading to a misalignment in the perception of what care is necessary.
2 Taking care of: elite groups influenced by virtue signaling might choose to support initiatives that are more visible or publicly rewarding rather than those that are most needed. This shifts the focus from effective and genuine responses to those that enhance the perception of the caregivers.
3 Care-giving: virtue signaling often involves superficial or symbolic actions that will likely not effectively address the real needs.
4 Care-receiving: as a result of the three previous steps not being efficient, the care will likely not have beneficial effects, and the feedback from care recipients might indicate that the care was not satisfactory or helpful. This feedback might not even be heard by the elite.

On the other hand, many of these are mitigated when elite members of the same group are the ones to initiate care. All the same, it is not as though relatively high-profile members of the ND movement are somehow immune from virtue signaling, and when they engage in it, it is highly likely that the fourth step of care won't be fulfilled. Even assuming, as we largely are, that those who are involved in the movement are genuine and act in the best interests of others, they may nevertheless fail to verify whether their care has actually been useful for those they aim to help.

6.5 Conclusion

While the ND movement is properly understood as acknowledging both the scientific reality of autism and the fact that autism *can* be harmful, actual or perceived elite capture of the movement contributes to the appearances of minimizing the negative and obscuring the objective. It is in the interests of both the perceived elites in the movement and those outside the movement contributing to the neutralization and culturalization of the movement's demands, that the difficult and scientifically grounded reality of autism not be placed center stage. For them, after all, the satisfaction of the culturalized and easily co-opted forms of the movement's demands are most beneficial.

We think this is the major way in which destigmatization has limits and that some of what is problematic about this can profitably be understood in terms of failures of care provision. We also contend that the ND movement increases this risk by having destigmatization as its core demand. However, this is very different from saying that the ND movement somehow rests, at its core, on the problematic assumptions that autism is not harmful or that it is, in fact, interested in obscuring the scientific reality of autism. Such are misapprehensions. Consequently, we assert that without a reorientation of their focus, the most prominent criticisms of the ND movement are failing to get at one of the most significant worries that the movement must face.

Of course, challenges remain. The most obvious one is to find ways to correct the bias of virtue signaling, address its negative repercussions, and redirect actions to adequately cover all four stages of care provision:

1 How can we accurately identify the needs of autistic people, especially given the diversity of neurodivergences?

2 How can we recognize and take responsibility in care providing; who decides or legislates on matters of support and potentially therapeutic care?
3 How can we ensure that care providers are acting in a meaningful way, rather than superficially or symbolically?
4 How can we verify that care has been adequately provided, respecting the heterogeneity of needs among autistic people? How can we create accommodations or understand autism in ways that do not discriminate against some autistic people? Finally, how can we gather feedback from such a diverse group of people?

In addition to these remaining challenges for the ND movement, there are some unaddressed challenges for our analysis. For one thing, we have been fairly sanguine about the amount of goodwill, commitment, and fraternity within the ND movement. Not all will agree with this portrayal and may consequently think that we have downplayed the risk of within-group elite capture. Giving a comprehensive assessment of the internal character of a diverse movement is difficult, so we only note that if those who are more skeptical turn out to be correct, that will only show the need for increased vigilance within the ND movement, which we are not inclined to disagree with in any case.

A further issue concerns the standing of the ND movement to speak for the community of people with autism as a whole. To the extent that the ND movement has the unity of a political constituency and there are members of the autistic community who are politically opposed to it, the ND movement cannot unproblematically claim to represent the entire autistic community. This means that the framework we have been working with will only be able to provide an incomplete analysis of the relation between the ND movement and the autistic community. In a way, this is a shortcoming, but it is one that we accept, and it does not, we think, diminish the power of our responses to the strands of backlash.

Notes

1 Elite capture is explored in more depth below but, in outline, it is what happens when a subgroup directs resources intended for the whole group in a way that serves their own narrower interests.
2 There is, of course, a much broader debate about the relation between psychiatric categories and harm and it remains a position held by many philosophers that harm is a necessary component of any valid psychiatric category. For instance, according to Cooper (2015), psychiatric categories must induce distress to be valid and Knox (2023) argues that categories justified in psychiatric terms should enhance well-being. Accordingly, one might question whether embracing neurodiversity necessitates significant shifts in psychiatric practice: Does it imply that categories recognized by the ND movement should no longer be within the purview of psychiatry, or does it compel a departure from established norms? Thus, the worry that ND activists are claiming autism is not harmful, when combined with such views, appears to present a kind of dilemma: either accepting that autism is outside of the purview of legitimate psychiatric concern or rejecting foundational principles about the definition of psychiatric categories.
3 Given such a construal, one could argue that therapeutic harm is a form of social harm, given that medicine and therapy are social practices. Nevertheless, because of the history and salience of therapeutic harm for autistic people, it merits a distinct label.
4 A second way to consider this need for recognition and respect involves examining what counts as care providing. We propose a more in-depth discussion on the criteria surrounding care in the last section.
5 As defined by the ethics of care, such as Carol Gilligan's (Gilligan 1982) and Joan Tronto's (Tronto 1998).
6 We come back to this idea in the last section when discussing depathologization.

7 This tendency to allow theoretical questions to be settled by practical exigencies is a major issue in theoretical psychopathology. See Gibson (2024) for a discussion in relation to addiction and for a detailed argument that the philosophically central questions about addiction can be answered without the need to settle whether addiction is a disease.
8 This dichotomy between "activism" and "science" in the context of ND and the understanding of autism may partly result from residues of the anti-psychiatry movement (Arnaud and Gagné-Julien 2023).
9 Naturally, DiAngelo herself offers to facilitate such workshops and give such speeches, charging a speaking fee of around $15 000 (Bergner 2020).
10 We directly borrow these ideas from Jami Anderson, who suggested them to us.
11 Ian Hacking discusses what he calls the looping effect for autism in Hacking (2007). Looping effect occurs when classifications of people influence the behavior and self-perceptions of those classified, which in turn slightly modifies the classification itself. Elite capture would impact the second step of this looping effect — when only the elite remains labeled "autistic," modifying the definition of autism, and therefore narrowing the category.

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7

ELEPHANTS AND ARMADILLOS

Anti-Autistic Ideology Forms an Anti-Autistic World

Jami L. Anderson

7.1 Introduction

Critics of Applied Behavior Analysis (ABA) as a treatment for autism claim that ABA cannot help autistics act "less autistic", that is, exhibit fewer behaviors typical of autistics[1] such as stereotypy ("stimming"), avoiding eye contact, and echolalia. Frank Klein, an early critic of ABA, argued that attempting to modify the behavior of autistics so they appear normal is about as productive as trying to train an elephant to act like an armadillo.[2] Indeed, Klein and his fellow ABA critics insist, the elephant cannot even successfully *pretend* to be an armadillo. Attempting to teach an elephant to act as an armadillo is a waste of resources and time and does both the elephant and the elephant's parents a grave disservice as, inevitably, unrealistic expectations are raised and hopes ultimately dashed. It would be far better to accept the elephant as they are and support the elephant so they learn to live *as an elephant* in an armadillo world. And, critics continue, resources now spent on treating elephants would be better spent making changes to the armadillo culture so it could better accommodate and support elephants. Analogously, rather than waste time and financial and emotional resources training autistic children to act as if they were neurotypical, it would be better to spend those resources restructuring neurotypical society to accommodate autistic individuals.

This criticism, that ABA cannot succeed, is harmful and a colossal waste of funds, is not new, and advocates of ABA have been responding to it for decades. Margaret Anderson, an ABA practitioner, uses Klein's elephant and armadillo analogy to build her defense of ABA:

> [O]ne might argue that while one would not seek to change the elephant into an armadillo, there may be some armadillo skills and knowledge that might be helpful to the elephant in living in an overwhelmingly armadillo culture. Herein lies the crux of the 'why teach/teach what?' issue: autistic people live in an overwhelmingly neurotypical world.
>
> I recall in the move to close institutions for people with learning disabilities in the 1970s… there was much optimism about how, when people with disabilities were more 'seen' and became part of the community, prejudices would disappear and people's differences

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> would magically no longer be problematic. Well, it's 30 years later and we're still working on it: people with learning disabilities face discrimination and prejudice on a daily basis. Thus, the autism advocates' plea for a more tolerant society is one which we must all not only endorse but work toward. In the mean time [sic?][3], we also need to equip people to live in the world we currently have.
>
> (Anderson 2007, 115–16)

Margaret Anderson's response provides insight both into how ABA therapists conceive of autism and how they regard their role as therapy providers for autistic children. Significantly, Anderson does not deny the elephant/armadillo analogy. She does not, for example, insist that autistic children are not nearly as different from neurotypical children as elephants are from armadillos. Secondly, she accepts without question that the world elephants live in is a place made by and for armadillos. Analogously, the world *we* live in is made by and for neurotypicals, not autistics, and autistics are not, according to Anderson, naturally equipped for this world. And, it seems, for that reason alone autistics bear the full burden of conforming to neurotypical cultural expectations. Admittedly, no training will change the elephant into an armadillo. Yet proper training—ABA therapy—will equip autistic individuals to live in neurotypical society. As to the implied criticism that expecting autistics to contort themselves to neurotypical social standards is unfair and overly demanding, Anderson seems to agree. It *would* be better if autistics didn't bear the full burden of changing to fit into a neurotypical world. It would be better if neurotypicals were fair, just, and accommodating. But our world is not a good place—certainly not for autistics. Indeed, insists Anderson, it is precisely because neurotypicals bully autistics "on a daily basis" that ABA therapy is so desperately important. Finally, and most significantly, it is ABA therapy and *only ABA therapy* that properly equips autistics to live in a neurotypical society with its anti-autism bullying.[4]

This dialogue between ABA critics and ABA advocates is telling not only because it lays bare the disagreement as to the (dis)value of ABA therapy for autistics, but because it reveals how dramatically public discourse about ABA advocacy and autism advocacy has shifted in the past two decades. Just over twenty years ago highly energetic ABA proponents advocated for ABA to be the default therapy option in special education settings and for ABA services to be covered by private insurance—goals that have largely been realized.[5] Critics of ABA had little public influence then and ABA defenders characterized their criticisms as misguided and irresponsible. Worse, adult autistics who criticized ABA therapy, referring to themselves as "ABA survivors", were dismissed by ABA advocates as imposters and irresponsible cranks.[6]

Today, in no small part because of the continuing advocacy efforts of ABA survivors, the inadequacies of using ABA to treat autism are well documented and increasingly well-known. The Løvaas Technique, the 1960s ABA therapy program heralded as a miracle cure for autism, is now known to have been deeply unethical and ineffective. And, an increasing number of meta-analyses reveal that the purported benefits of contemporary ABA therapy for autistic children are uncertain if not non-existent. In light of these revelations, ABA advocates have changed their strategy. No longer do they claim that ABA cures autistic children. Nor do they claim that with early intensive intervention autistic children will be "school ready" by age five or six. But they still insist that autism is a condition that creates terrible hardships for the autistic children and their families. They still insist that autistic children benefit from intensive ABA therapy—therapy regimes that now extend beyond

the pre-school years and into early adulthood[7]—so autistics can more adeptly navigate this neurotypical world. ABA advocates also continue to insist that ABA is the best therapy approach for treating autistic children and that criticisms of ABA have "gone too far".[8]

This line of reasoning used by ABA advocates—"ABA isn't like it used to be, so criticisms of ABA threaten the well-being of autistic children"—is a tidy piece of rhetorical jujitsu. Ignoring the problems with contemporary ABA therapy, ABA advocates redirect the conversation to *early* ABA and then deftly criticize the *critics* of ABA, claiming it is *they* who are the real threat to autistic children. This ideologically driven reasoning is part of a larger ABA ideology that is the focus of this chapter.

I use the term "ABA ideology" to mean not only the line of reasoning used by ABA advocates just described, but also the anti-autism stereotypes perpetuated and autism misinformation promulgated by ABA advocates to justify ABA as the go-to treatment for autism. The anti-autism stereotypes and misinformation are not only extremely harmful to autistics—the hateful and dehumanizing claims cause real trauma to autistics and feed anti-autism hate and bullying—but they are based on the experiences of autistics in the 1950s, when autistics were routinely isolated and horrifically abused in state institutions. In short, ABA ideology *continues* to tell an anti-autism narrative that is more than seventy years out of date and so willfully ignores all the advances autistic advocates have made in the past few decades.[9]

In this chapter, I develop a two-part criticism of ABA ideology. The first part looks at how ABA ideology has demonized autistic children for decades to support the claim that ABA therapy is a vital treatment for autistic children. Early ABA therapists marketed an anti-autism narrative to transform deeply unethical experiments on autistic children into hero's work. The worse ABA therapists made autistic children out to be, the more defensible it was to subject those children to cruel and unethical ABA treatments. Distressingly, the dehumanizing anti-autism narrative advanced by early ABA therapists is the very same anti-autism narrative told by contemporary ABA therapists to justify ABA for autistic children.[10]

The second part of my criticism is that the anti-autism narratives have been repeated so widely and consistently that they have become the meaning of autism in public discourse. Tens of thousands of ABA service websites state as fact that all autistic children engage in extreme *autistic behaviors*—obnoxious, self-harming, and disgusting behaviors—that make autism a terribly debilitating condition. Further, ABA websites assert that, without ABA therapy, these negative autistic behaviors worsen as the child gets older, turning difficult autistic children into unmanageable if not dangerous adults. These claims are unsupported by evidence yet asserted so frequently and emphatically that most people accept without question that autistics are inherently violent, incontinent, and suicidal. Unsurprisingly, this anti-autism narrative inspires anti-autism bullying and violence. As long as contemporary ABA therapists sustain these anti-autism narratives they fuel the very anti-autism bullying and violence they claim is the reason ABA therapy is necessary for autistic children.

7.2 ABA Spawns an Anti-Autism Narrative

Autism was launched into the public eye on May 7, 1965, when *Life* magazine published an article called "Screams, Slaps and Love" (Moser 1965). The article lauded Dr. Ivar Løvaas[11] and his technique, later known as The Løvaas Technique, for treating "mentally crippled" autistic children.

The article featured four pre-school children, each photographed crying, screaming, or being hit by a team of researchers as part of the UCLA Young Autism Project. The children, all of whom were diagnosed as autistic, were described as "mental cripples", "bizarre", suffering "uncontrolled madness", "diabolical", having "broken mind[s]", and as "utterly withdrawn children whose minds are sealed against all human contact and who had *turned their homes into hells*" (Moser 1965, emphasis added). None of the children were credited with having any lovable or endearing traits. One child, Billy, was described as having made life a "nightmare" for his family because "it is *virtually impossible* for any intelligent, well-intentioned parent to cope with an autistic youngster" (Moser, emphasis added).

The article described Løvaas's clinic as a "gallery of madness" (Moser 1965). The children were kept in small testing rooms all day, every day, subjected to intense behavioral modification treatments. To induce desirable behavior, the researchers used "rewards", usually food and candy. To reduce undesirable behaviors, the research team used "aversives", including loud shouts, hard slaps, withholding food, subjecting them to electrified flooring, and shocking them with electric cattle prods. The passage describing the use of electric shocks on Pamela is worth quoting at length:

> At one point Pamela had been making progress, learning to read a little, speak a few words sensibly. But then she came to a blank wall, drifting off during lessons into her wild expressions and gesticulations. Scoldings and stern shakings did nothing. Like many autistic children, Pamela simply did not have enough anxiety to be frightened.
>
> To give her something to be anxious about, she was taken to the shock room, where the floor is laced with metallic strips. Two electrodes were put on her bare back, and her shoes removed.
>
> When she resumed her habit of staring at her hand, Lovaas sent a mild jolt of current through the floor into her bare feet. It was harmless but uncomfortable. With instinctive cunning, Pamela sought to mollify Lovaas with hugs. But he insisted she go on with her reading lesson. She read for a while, then lapsed into a screaming fit. Lovaas, yelling "No!", turned on the current. Pamela jumped—learned a new respect for "No".
>
> (Moser 1965)

It seems inconceivable that subjecting a little girl to intense pain each time she struggled to read and speak counted as *therapy*. Yet Løvaas explained that the punishments—so long as they were delivered "instantly" and "immutably"—were a necessary way to "break down the *habits of madness*" (Moser 1965, emphasis added). It was this conviction that autistic behaviors were simply "habits" that set Løvaas's theory of autism apart from the mainstream psychological theories of autism at that time. And it was not just Løvaas's theory of autism that was bold: he rejected the standard theories of mental illness then espoused by his professional peers because he believed they "relieved the patient of responsibility for his actions" (Moser 1965). Løvaas claimed that by "holding any mentally crippled child accountable for his behavior and forcing him to act normal, [we] can push the child toward normality" (Moser 1965). But what is the cause of these strikingly unusual "habits"—refusing eye contact, delayed speech, aversion to touch, repetitive behaviors, echolalia, "meltdowns"—that young autistic children exhibit at such an early age? A good

question that requires an answer. But Løvaas wasn't interested in the etiology of autism. "[Y]ou have to put out the fire first before you worry how it started", Løvaas quipped (Moser 1965). A nifty metaphor—one designed to focus our attention on the blazing dangers caused by autism—but an evasion that raises even more questions. After all, can we really eliminate autistic behaviors if we have *no idea* what their causes are? And aren't we risking making matters far worse if we rush to eliminate the behaviors all while refusing to wonder about the many possible causes of those behaviors? These concerns did not interest Løvaas.

7.2.1 Early ABA: The Løvaas Technique

Prior to the Løvaas Technique, prognoses for autistic children were grim and most treatments were brutal.[12] Such treatments included removing children from their parents (a treatment entitled "parentdectomy" (Bettelheim 1967, 12–4), full-time state and private institutionalization which relied on heavy doses of anti-psychotic drugs,[13] LSD-25,[14] electroconvulsive therapy (ECT),[15] insulin shock therapy, and pre-frontal lobotomy (Rutter et al. 1967).

Løvaas rejected all therapeutic approaches intended to alter the "autistic brain" or "autistic personality" and instead focused solely on eliminating "autistic behaviors". Løvaas identified four definitive behaviors of autism: a failure to develop relationships, problems with language, ritualistic behaviors,[16] and a "potential for normal intelligence" (Lovaas 1987). According to Løvaas, children who successfully completed his therapy program were *cured* by the time they were old enough to begin school—a promise that seemed nothing short of miraculous. At that time, educational opportunities for autistic children were extremely limited. In the early 1970s, US public schools accommodated only one out of five children with disabilities, typically those with the least severe impairments (OSEP 2007). Most states had laws that explicitly *excluded* children with certain types of disabilities from attending public school, including children diagnosed as "emotionally disturbed" or "mentally retarded", labels which certainly would have been attached to children diagnosed as autistic (NCD 2000). Many of the more than 1 million children excluded from the public school system (NCD 2000) lived at state-managed total institutions and were provided no educational services whatsoever (Schiller et al. 2007). Given the appalling options at the time, the optimistic future for autistic children that Løvaas painted was eagerly, albeit uncritically, embraced by parents of autistic children.

The Løvaas Technique had three phases, one phase per year in a three-year program. The first year focused on eliminating self-stimulating behaviors such as moaning and rocking, and teaching the child to imitate desirable behaviors such as playing with toys in their intended manner.[17] The second year addressed early expressive and abstract linguistic skills, playing with other children, developing age-appropriate peer interaction, and socializing skills. The third year taught the child to exhibit appropriate emotions and pre-academic skills such as reading, writing and arithmetic.

Autistic children and their parents had to meet strict requirements to be admitted into Løvaas's program: children had to start very young; both parents had to commit completely to the program; the training had to take place at Løvaas's UCLA institute; the child had to have a high IQ; and the child had to be strongly motivated by food. If any of these factors were absent, Løvaas refused the child admission. Let's look at each of these requirements more fully.

Løvaas admitted only very young children because he believed that by school age, the "window had closed" and the autistic behaviors could not be altered. Løvaas required 40 to 60 hours of therapy every single week and required the parents to bring their child to therapy every day, year-round, for three years. Both parents had to become fully trained in the techniques so they could continue therapy when the children were at home. Additionally, all experiences of the child—doctor's visits, playing in a park, going to a restaurant, and so on—had to comply with the behavior modification training. Effectively, the children were in therapy every minute of their lives for years. The regime was so intense Løvaas insisted that the mothers quit their jobs so they could devote their full attention to training their autistic child (Feinstein 2010, 128–32).

Løvaas's first attempt to treat autism was with autistic children who were residents of Camarillo State Mental Hospital (Feinstein, 131). He met with each child intermittently and the program was ended after one year. All the children "regressed" after the program ended, and Løvaas regarded the program a failure, blaming the poor environment and insufficient contact hours as the reasons for the abysmal results. To ensure better outcomes for his UCLA program, Løvaas insisted that all treatments take place at the UCLA clinic and include only children who live at home with their parents who would continue the treatments exactly as Løvaas directed.

Although Løvaas said he could cure *autism*, he accepted only those autistic children with "high IQs". The children Løvaas deemed as "severely autistic" were not admitted as he believed they would not benefit from it. Løvaas seemed to toy with the idea that there were two distinct kinds of autistics. He wrote, "First, at least two distinctively different groups emerged from the follow-up data in the experimental group. Perhaps this finding implies different etiologies" (Lovaas 1987, 3). Although he did not attempt to determine whether two distinct etiologies resulted in two distinct autistic kinds, Løvaas did consistently distinguish the high IQ autistics from the low IQ autistics, and consistently asserted that the so-called low IQ autistics as not worthy of therapy.

Løvaas did not use standardized tests to measure the IQs of any of the children who applied for his program. Instead, Løvaas created his own idiosyncratic way to calculate "IQ". It is therefore unclear what Løvaas's terms "high IQ" or "severely autistic" mean exactly. Løvaas's "IQ test" was far from reliable as about half the children he admitted into his program either showed no significant gains or had worse scores than when they began the program (Shea 2004, 355). The only plausible way to understand "having a high IQ" in Løvaasian terms is as "an autistic child who benefits from the Løvaas Technique". In contrast, "severely autistic" just means "any autistic child who is expected to flunk out and so was not admitted, was admitted and then flunked out, or made it through the entire program but did not benefit because they are 'incorrigible'". By separating the "high IQ" autistic children from the "severely autistic" children, Løvaas created a caste system among autistics that deemed only a small percentage of autistic children as worthy of therapy. And what to do for the "severely autistic"? Løvaas had nothing to offer. Unfortunately, but certainly in large part because of how successfully Løvaas marketed the Løvaas Technique, the term "severely autistic" is still used as if it has scientific meaning when it has none.[18] This is unfortunate as there is no evidence that children who "flunk out" of ABA programs are less intelligent or "more difficult" than the few who survive ABA. And there is no evidence that they are "incorrigible" broadly understood, or even that their long-term outcomes are

worse than the so-called high IQ children. Nonetheless, the term "severely autistic" is never a compliment and children so labeled are still treated as unworthy of resources.

The requirement that children be highly motivated by food in order to be admitted to Løvaas's program may strike one as odd yet it makes sense because Løvaas believed that food and candy were the most effective reinforcers. Expressions of affection were discouraged, as when Pamela's attempt to hug the researcher was not only rebuffed but characterized as motivated by an "instinctive cunning" rather than out of a genuine desire for affection or a desire for an emotional connection.

And consider how Billy's parents used his love for hamburgers to ensure his admission into Løvaas's program:

> Inexplicably, Billy became hooked on [hamburgers]—hooked to the point that he would starve himself rather than eat anything else…Pat and her husband were enthusiastic [about Lovaas's experimental program], even though they knew about the punishment that Billy would be subjected to.
>
> Their one fear was that Billy, erratic child that he was, would flunk his audition in front of Lovaas. But they knew that one of the criteria was that the children accepted must like to eat, and must be willing to expend a lot of energy to obtain food. So Pat and her husband talked things over, and they had an idea.
>
> When they took Billy to see Dr. Lovaas, they made a stop on the way at the drive-in. Billy, given the hamburgers during the interview, passed the entrance exam with flying colors.
>
> (Moser, 96)

To prime the children to obey commands, researchers withheld all regular meals for *several months* at the start of the program, and "spoonfuls of food were doled out only for right answers" (Moser, 93). At the start of the program Billy was non-verbal. The following passage describes how he was trained to verbalize responses:

> When a ball was held up, Billy would just as likely say *milk*. This went on for frustrating *weeks*. In the sixth week, the staff realized that Billy was smarter than they had thought. When he gave the wrong word, the researcher would prompt him with the right word. When he echoed it, he was fed. Changing the method, the researcher held up a ball. Billy said, "Me" and got nothing. He fidgeted. Desperate he began going through his whole vocabulary. When he hit *ball* he was fed. In an hour Billy had caught on and could find the right word immediately. Today he can ask for any food by name, ask to go out, to go to the bathroom. In short, Billy can talk. All it took was ingenuity—and *90,000 trials*.
>
> (Moser, 93)

The Løvaas Technique was time-consuming and fatiguing for all involved.

How successful was the Løvaas Technique? In his notorious 1987 article, Løvaas reported an astonishing 47% success rate:

> In descriptive terms, the 19-subject experimental group shows 9 children (47%) who successfully passed through normal first grade in a public school and obtained an average

> or above average score on IQ tests (M = 107, range 94–120). Eight subjects (42%) passed first grade in aphasia classes and obtained a mean IQ score within the mildly retarded range of intellectual functioning (M = 70, range = 56–95). Only two children (10%) were placed in classes for autistic/retarded children and scored in the profoundly retarded range (IQ < 30).
>
> (Lovaas, 1987, 6)

And:

> …47% of the experimental group achieved normal intellectual and educational functioning in contrast to only 2% of the control group subjects.
>
> (Lovaas, 1987, 7)

And:

> School personnel describe these children as indistinguishable from their normal friends.
>
> (Lovaas, 1987, 7)

Treatments for some of the autistic children extended for *years* after they left the institute:

> All subjects who went on to normal first grade were reduced in treatment from the 40 hr per week characteristic of the first 2 years to 10 hr or less per week during kindergarten. After a subject had started first grade, the project maintaining minimal (at most) consultant relationship with some families. In two cases, this consultation and the subsequent correction of problem behaviors were judged to be essential in maintaining treatment gains. Subjects who did not recover in the experimental group received 40 hr or more per week of one-to-one treatment for *more than 6 years (more than 14,000 hr one-to-one treatment)*….
>
> (Lovaas, 1987, 5, emphasis added)

So the three-year program initially promised extended for more than six years with a mind-boggling 14,000 hours of treatment! Even more amazing were the outcomes mentioned—47% of the children becoming "normal"—given that other studies on treatment programs for autistic children had success rates of 1.5%.[19]

In the early days, Løvaas was adamant that strong aversives were absolutely necessary to eliminate the "worst autistic behaviors", stating that there is a need to "spank them, and spank them good" (Chance 1974, 9). Yet, once word got out that researchers were using cattle prods on preschoolers, protests were held outside UCLA's psychology building and Løvaas dropped their use from the therapy program (Feinstein, 131–32). Later, Løvaas seems to have changed his mind about the use of strong aversives—not because he thought they were cruel—but because he decided they were ineffective. Decades after his original study, Løvaas stated:

> The problem was that it turned out the children adapted to the aversives. The self-injurious behavior would stop, maybe for two days, two hours, two months, and then it would

> pop right up again. We'd have to apply the aversives again, only this time we'd have to be more aversive. The aversives became like butchery; the more you learned about the client the more you thought that applying the aversives would be like being a butcher.
>
> (Johnson 1994)

To date no one has been able to replicate Løvaas's results nor has anyone been able to cure any autistic individual using his techniques (Smith 2000). Many have argued that Løvaas's client population was a non-representative sample of autistic children and therefore unfavorably skewed the success rate of the treatment program (Schopler, Short, and Mesibov 1989). Certainly, screening out those children with ambivalent parents and "flunking" children who had not shown sufficient improvement by age 6 were two methods Løvaas used to fluff his success rates. Moreover, the "47% cure rate" which captured the world's imagination was based on a group of only 19 children. But the problem was not simply the tiny, specially curated sample: Løvaas did not use randomized, blind controls to assess the progress of the children but instead relied on reports of the children's parents and teachers, none of whom were dispassionate assessors.

Some ABA defenders acknowledge that no current ABA program can attain the results Løvaas produced but insist the reason is that researchers are no longer permitted to slap or shock their research subjects (Gresham and MacMillan 1998). But given that Løvaas acknowledged that no aversives stop undesirable behaviors from "popping right up" again, this explanation is unpersuasive. Nonetheless, institutes that offer ABA-based services to treat autism *still assert as fact* that up to 50% of autistic children who receive their services will benefit to the point that they can "return to mainstream classes" (Walsh 2011, 72).

Løvaas consistently described autistic children using only the most dehumanizing language. In a 1974 interview, Løvaas stated:

> Autistic children are severely disturbed. People seem to be no more than objects to them. They show no signs of warmth toward others, they do not appear to enjoy being held.
>
> And:
>
> [W]hen the child reaches two years or so, the behavior is *so bizarre*, so different from other children of that age, that you can't fail to notice it.
>
> And:
>
> [B]elieve me, they are *monsters, little monsters*.
>
> (Chance 1974)

Løvaas presented the autistic child's prognoses in stark terms: either submit to the grueling regime of behavior modification or continue to allow these "monsters" to make family life a living hell.[20] Despite criticism from Løvaas's professional colleagues (Feinstein, 132–35), the demand for Løvaas's ABA program was intense from the start and grew exponentially. It seems that after being told that their toddlers would develop into violent monsters, parents clamored for a program—even one that required electric shocks and slaps—that promised a cure.

7.2.2 Contemporary ABA: EIBI

Although some ABA therapists continue to defend using an unadulterated Løvaas Technique to treat autistic children, the majority of contemporary ABA therapists endorse a version of ABA called Early Intensive Behavioral Intervention (EIBI) for treating autism.[21] They also claim that, because of the differences between EIBI and the Løvaas Technique, "ABA isn't like it used to be". I argue that in all important respects, EIBI is **exactly** like the Løvaas Technique and that any differences are superficial and therefore the claim that ABA isn't what it used to be, is false. Let's see how the two therapy models compare.

First, as with the Løvaas Technique, EIBI therapy is designed for pre-school children to prepare them for mainstream classrooms.[22] EIBI therapists are committed to the Løvaasian claim that therapy should be intense, typically 40 hours a week of one-on-one sessions. In addition, EIBI programs require parents to become trained so they can continue behavioral modification regimes at home.[23] And, though EIBI programs no longer require mothers to quit their jobs, mothers[24] bear the lion's share of the care for autistic children and often quit working so they can devote more time to their child's intensive therapy demands (DoubleCare ABA 2023). Just as with Løvaas, EIBI states that therapy must begin when the child is very young, claiming that those are the years when a child's brain is "plastic". And, as Løvaas did, EIBI therapists insist that, unless treatment begins early the prognoses are very poor (KOTM 2024). While Løvaas started children at two years old, EIBI programs have pushed back the start date to 12 months old, and with some starting treatments as early as 6 months old (Golden Care Therapy 2022).

One difference between the Løvaas Technique and EIBI is that EIBI does not rely on "strong aversives" (Matson 2009, 9–11) though "weak aversives" and "extinction" are both vital parts of EIBI (Amaral, Dawson, and Geschwind 2011, 1047–48).[25] Aversives (such as taking away toys and "thigh smacking") (Matson, 11) are intended to cause a child to cease engaging in undesirable behaviors. Extinction, which entails withdrawing all attention from the child, is intended to cause the child to adopt desirable behaviors (Fovel 2002).

EIBI therapists now acknowledge that there is overwhelming evidence of a biological basis for autism[26] but nonetheless remain committed to a behaviorist therapy model and to the claim that "autism is autistic behaviors" which are "pathological behaviors" that can be eliminated through the use of "intensive, structured, and individualized intervention" to "promote positive behavioral changes…and reduce maladaptive behaviors" (KOTM 2024). EIBI identifies the same "maladaptive autistic behaviors" as Løvaas did: language delays, social interaction difficulties, and self-stimulatory/stereotypy behaviors.

Finally, just as with the Løvaas Technique, the outcomes of EIBI therapy are exceedingly murky. Avoiding the term "cure", EIBI programs promise a *recovery* from autism. EIBI's use of the term "recovery" can be traced back to Løvaas. While in the early years Løvaas claimed to cure autistic children, Løvaas later preferred to speak of "recovery," as we saw in a quoted passage above. The rest of that passage shows Løvaas used the term "recovery" twice. He wrote:

> Subjects *who did not recover* in the experimental group received 40 hr or more per week of one-to-one treatment for more than 6 years (more than 14,000 hr one-to-one treatment) with some improvement shown each year but with only 1 subject *recovering*.
>
> (Lovaas, 1987, 5)

And in that same article:

> [O]n the basis of testing to date, the *recovered children* show no permanent intellectual or behavioral deficits and their language appears normal.
>
> (Lovaas, 1987, 8, emphasis added)

This may be the first use of the term "recovery" in reference to treating autism. Confusingly, EIBI therapists distinguish between "full recovery" and "partial recovery" though the exact standards for assigning these labels is hopelessly unclear (Gresham and MacMillan 1997).

To make things yet more complicated, conversations addressing the possibility of "outgrowing" autism are common with some parents insisting that their faith in their child outgrowing autism is the only thing that keeps them committed to the grueling EIBI regime. Sustaining this fantasy, a *Wall Street Journal* article discussed the claims of parents that their children completely outgrew autism (Wang 2013). The article used the terms "recovered from" and "outgrew" interchangeably. By saying that their child has outgrown autism, they are implying that their child was cured of autism—certainly that is what many other parents hope happens with their own autistic child. Thus even though EIBI programs insist that "recovery" is the best one can hope for, tens of thousands of parents in EIBI programs nonetheless believe they are working toward curing their child of autism and EIBI websites do little to correct this misguided belief.

We saw that Løvaas separated autistic children into two kinds, the "high IQ autistic" and the "severely autistic", and claimed that only the high IQ autistic children were treatable. EIBI therapists likewise group autistic children into two categories, the high functioning (HF) and low functioning (LF). Ill-defined, the exact meanings of these labels were unclear from the start. The basic idea was that HF children, like Løvaas's "high IQ" children, benefitted from EIBI. LF children, like Løvaas's "severely autistic", do not benefit from EIBI. But young children newly diagnosed as autistic cannot be identified as HF or LF until after they have gone through several years of EIBI therapy. Thus, it is not unusual for autistic children perceived as being quite bright or "precocious" (early to speak, hyperlexic) and initially perceived as being HF to fair very poorly with EIBI and so later be labeled LF. Just as Løvaas's claim that "only high IQ autistics are cured by the Løvaas Technique" really means that the only autistics cured by the Løvaas Technique are high IQ autistics, the claim that "only HF autistic children full recover through EIBI" really means that the only autistics to fully "recover" through EIBI are HF autistics.

Although HF and LF are no longer considered scientifically valid concepts, the terms have entered mainstream culture and their use is pervasive.[27] Some use HF exclusively for autistic savants and geniuses but often HF is used as shorthand for "Asperger", a sub-category of the Autism spectrum in the DSM-IV but no longer a category in the DSM-5. Used in that way, HF is much more complex than IQ or intelligence and refers to specific linguistic patterns as well as a specific set of social and perseverative behaviors. Other times HF is used as a sub-category of classic autism. In that case, HF refers to a set of linguistic, behavioral, and perseverative behaviors entirely distinct from those attributed to Asperger's Syndrome. Similarly, LF is used very loosely and inconsistently. Some restrict LF to refer to only "severely impaired" (non-verbal) autistics. Sometimes

LF is considered synonymous with PDD-NOS (Pervasive Developmental Delays Not Otherwise Specified—another sub-category of autism in the DSM-IV but not the DSM-5), yet it is just as common to regard PDD-NOS as distinct from LF, and so entirely distinct from the classic autism (LF/HF) divide. Since there is no MF (middle or moderate functioning), the use of HF and LF implies that autism only happens at the intellectual extremes.

Is EIBI effective in treating autism? No. In recent years, a number of studies have shown that EIBI fails to deliver on its promises as it does not work for the majority of autistic learners (Howlin, MagiatiI, and Charman 2009) and has benefits limited to clinical rather than natural settings (Myers and Johnson 2007). Meta-analyses of EIBI studies consistently show that EIBI fails to provide long-term improvement for social skills deficiencies or language development problems, two of the three so-called core deficits of autism. Some argue that the strongest case for EIBI is that it succeeds in training autistic children no longer to exhibit self-stimulatory behaviors though there is scant evidence that EIBI even manages that well.[28] EIBI is also extremely expensive with families spending between $20,000 and $70,000 per year for private EIBI services (Chasson et al. 2007). Many families rely on services through public school special education programs, and pinning down the costs of these services is difficult with some estimates capping costs at $60,000 per child per year and others estimating costs as high as $250,000 per child per year.[29]

So let's circle back to the ABA claim mentioned at the start of this chapter, which is that "ABA isn't like it used to be". What I hope to have shown is that, aside from changes in terminology, EIBI is pretty much *exactly* like ABA used to be: it is exhausting, expensive, ineffective, and scientifically dubious. Now I will develop the second part of my argument, which is a critique of the ABA ideology claim that autism is *so debilitating*, that autistic children are better off receiving ABA therapy—problematic as it is—rather than nothing at all.[30]

7.3 Debilitating Autistic Behaviors: Feces Smearing and Self-harm

On ABA therapy websites, in ABA certification manuals, in psychology textbooks and in psychology journal articles about autism, autism is invariably described as a "severely debilitating condition". But it is never explained what exactly is debilitating about autism. After all, autism does not shorten life expectancy or cause organ damage as other conditions do. To understand what it is about autism that is so "debilitating" from an ABA point of view, we need to go back to the first year of Løvaas's three-year program. We saw that the *sole goal* of that year was the elimination of self-stimulatory behaviors. Self-stimulatory behaviors are not only "bizarre" but they prevent the autistic child from eliminating the other two pathological autistic behaviors, language disorders and disordered social behaviors. Just as Løvaas did, EIBI programs begin their programs by targeting the self-stimulatory behaviors of autistic children. So what are self-stimulatory behaviors and why are they *so bad*?

First, a note about language. The terms *stereotypy* and *self-stimulatory* are used interchangeably. *Stimming* and *stim* are the verbalizations s*elf-stimulatory*. For the rest of this section, I will use the term *self-stimulatory* but also *stimming* and *stim*, as the latter two terms are used by autistics in non-technical conversations about autism.

7.3.1 Stimming: Neurotypical and Autistic

All humans stim. Pacing, bouncing a leg, chewing gum, twirling hair, chewing nails, holding one's arms across one's chest, arranging objects, fiddling with a ring, bracelet, pen or pencil are all self-stimulatory activities that neurotypical people engage in to soothe themselves when anxious or to assist their thought processes. In fact, the list of activities that count as "neurotypical stimming" is wide-ranging and includes such diverse activities as listening to music, doodling, foot jiggling, staring at, and lining up objects—indeed *any activity* that allows one to focus or clarify one's thoughts is stimming (Ghanizadeh 2010, 151). Neurotypical stimming is regarded as "purposeful" (Ghanizadeh, 151–53) and studies have shown that prohibiting neurotypical individuals from engaging in self-stimulatory behaviors during times of stress increases stress and inhibits their abilities to process thoughts, which in turn may negatively impact performance. In fact, some teachers encourage their neurotypical students to stim while taking tests (by chewing gum and bouncing gently on yoga ball chairs) to increase student test scores.

Autistics stim, too, but stimming behaviors that are labeled "autistic" do not look like neurotypical stimming. Autistics flap their hands, toe-walk, hum, moan, finger flick, and repeat words or phrases.[31] Autistic stimming is invariably characterized as "purposeless", "obsessive", and "nonfunctional" by ABA advocates (Ghanizadeh, 151–53). According to Løvaas,

> [T]hey spend a lot of time in repetitive behaviors we call self-stimulatory. For example, they rock themselves back and forth or they spin around in a circle. All kids have tantrums and engage in self-stimulatory behaviors, but with autistic kids it is extreme, *they can do it for hours*. Before you can get very far with developing normal social behaviors, *you have to eliminate these aberrant behaviors*.

And:

> An autistic child is perfectly happy to rock back and forth *hour after hour, day after day*. They will not do anything *productive* unless you change the environment so that rocking is no longer rewarding.
>
> (Chance 1974, 79, emphasis added)

Løvaas provides a twofold account of why stimming is debilitating: first, it is in and of itself time-wasting, unproductive behavior and, second, it prevents the autistic child from developing normal behaviors. The stereotype that individuals with disabilities are unproductive, costly, and failing to pull their own weight is an old one and has been critically analyzed by many disability scholars. And there certainly seems to be a whiff of the puritanical work ethic behind Løvaas's concern that autistic children are not accomplishing enough in every hour of every day.

If stimming is how humans soothe themselves, it would make sense that autistics would stim more than neurotypicals as they are more often anxious and over-whelmed than neurotypicals are. But doesn't that mean that that autistic stimming is purposeful in exactly the same way neurotypical stimming is? And doesn't that mean that autistics aren't stimming "too much", but that they are anxious too much? And if that's the case, wouldn't it make

more sense to backburner the matter of how much an autistic child is stimming and directly address their anxieties?

Let's look at an explanation offered by Allison B. Cunningham and Laura Schreibman of why autistic stimming needs to be "targeted" by "behavioral interventions" (i.e. EIBI):

> Stereotypy occupies a large proportion of the behavioral repertoires of children with autism. As such, many researchers and clinicians consider it an important aberrant behavior to target in behavioral intervention. First, stereotypy is socially stigmatizing. Stereotypies exhibited by children with autism are often perceived as age-inappropriate in form, focus, context, duration, or intensity. The stigma attached to children who frequently engage in such behavior has obviously undesirable consequences *from a parent's point of view*. It may be difficult and uncomfortable *for parents* to bring their child to public places. However, there are also direct undesirable consequence to the child's development. The child's involvement in the community, peer and adult interactions, or typical education setting may become severely restricted.
>
> (Cunningham and Schreibman 2008, 471, emphasis added)

Just as Løvaas did, Cunningham and Schreibman begin their discussion by mentioning the quantity of time autistics spend stimming. Then they turn to their deeper concern, which is that autistic stimming is "stigmatizing". Why are autistics stigmatized for stimming? Because, they claim, others regard the stimming as "age-inappropriate" behavior in "form, focus, context, duration, or intensity". In other words, the how, where, why. and for how long autistics stim is deemed by others as "inappropriate" and on *that basis*, they treat autistic children poorly. Once we keep foremost in our minds the reason autistics stim—to soothe themselves when anxious or to help themselves focus their thoughts and attention—it is concerning that expensive and time-consuming therapy is not justified in terms of its direct benefit to the autistic child but as a means to preempt the cruel behaviors of the (presumably) neurotypical people who are in contact with that child. Yet this is *exactly* the reasoning we saw at the start of this chapter when Margaret Anderson argued that ABA therapy was vital because autistics are bullied and subjected to violence on a daily basis—and, apparently, stigmatized *by their own parents* who are "uncomfortable" with the self-soothing behaviors of their autistic child.

Perhaps ABA advocates realize that increasingly fewer parents will be persuaded by this line of reasoning—particularly not parents who aim to be autistic advocates and are at ease with their autistic children stimming in public places—because invariably ABA advocates then identify far more alarming self-stimulatory "autistic behaviors" to justify ABA: feces smearing and violent self-harm. These two behaviors, both offered as examples of "bizarre self-stimulatory autistic behaviors", are not merely discomforting, they are frightening. Both are identified as examples of autistic behaviors so frequently that many people believe that *all* autistic individuals of *any age* smear feces and self-harm. If that truly was the case, it would certainly seem that ABA for autistic children is warranted since, even if it was rarely successful, preventing even a small number of autistic children from serious self-harm would seem worth the effort.

But the claim that autistics smear feces and self-harm *because they are autistic* is misleading and yet another instance of ABA advocates relying on an outdated and dehumanizing narrative to justify ABA therapy for autistics. It is certainly true that some autistic children

smear feces but many neurotypical children do, too. And some autistics self-harm but many neurotypical children self-harm as well. So what is going on? Why are these alarming claims being made about autistic children, over and over again, but not about neurotypical children? To find out, we should again turn to Løvaas and see what he had to say about autistic children feces smearing and violently self-harming.

7.3.2 Feces Smearing and Violent Self-Harm

The *Life* magazine article "Screams, Slaps and Love" served not only as the introduction of autism in America, but was the moment Løvaas introduced the narrative of autistics as violent, self-mutilating monsters:

> Billy, 7, *like so many of the autistic children in the U.S.*, would go into gigantic tantrums and fits of self-destruction, beating his head black and blue against walls.
>
> (Moser, 92, emphasis added)

Almost a decade after the "Screams" article, *Psychology Today* published a lengthy interview of Løvaas. Løvaas began the interview by describing the horrors of raising an autistic child:

> [A] lot of parents still think that it must be their fault somehow. They have heard that the parents of autistic children do not express love adequately, so they bend over backwards to be loving. What they get for their trouble is even *more bizarre behavior*—the child smears feces on the walls, bites his parents, and has *violent tantrums*.

And more dramatically:

> [T]here were some kids who would bite their fingers off. One kid had actually bitten off a finger—I think it was the little finger of her right hand—down to the second joint. She had started to chew the little finger of her left hand and had severe biting wounds all over her hands. She also pulled her fingernails out with her teeth. Another child chewed most of his right shoulder off. He would put his head sideways, lift his shoulder toward his mouth and chew his shoulder. He had actually chewed enough of his shoulder away that you could see the bones. We had other kids who broke their noses with their knees. Others would bang their head against the wall or against the edge of a metal filing cabinet.
>
> (Chance 1974, 79)

The images Løvaas paints are vivid and grotesque, drawing us in as our disgust makes us turn away. Given the large readership of *Psychology Today*, it is certain that this interview was how most Americans first learned about autism, and as a result accepted the anti-autism narrative Løvaas marketed as fact.

Then, in 1981, Løvaas published *Teaching Developmentally Disabled Children: The ME Book*, a best-selling book written to teach parents how to use behavioral modification techniques to help their children "quickly overcome many of their undesirable and interfering behaviors, such as their tantrums, their *bizarre* ritualistic behaviors, and their *self-injurious behaviors*" (Lovaas 1981, ix, emphasis added). Løvaas begins by describing

the grim future for these children if their parents fail to eliminate their "undesirable and interfering" behaviors:

> [A] severely self-destructive 10-year-old boy [] had been self-destructive since he was 2 years old. He has been institutionalized for most of his life because he could not be managed by his parents. He was retarded and he had "autistic features." …His head and face were full of scar tissue from self-inflicted wounds, his ears were swollen to the size of tennis balls and filled with blood, he had broken his nose, he often damaged his knees by knocking them against his head, and he had lately been hitting his elbows against his side and lower back so as to rupture his kidneys. If this behavior continued he would die.

And:

> [M]any retarded and psychotic children will try feces smearing…Some developmentally retarded persons, however, continue to smear their feces into adulthood. It is a horrible sight to see a 25-year-old adult smear his own feces on his body, in his hair, and in his mouth. He will not die from feces smearing, but such behavior in most cases prevents the person from remaining at home with his parents. One can also be virtually certain that this person will not be very popular among the teaching personnel in an institution and will probably be moved to a less optimal ward. Yet, in all likelihood, aversives can be used to stop him from feces smearing, just as they can be used to stop self-injurious behaviors.

And:

> Some children are so aggressive that they pose a danger to other children. Particularly serious is the situation in which the life of a younger sibling is threatened. Few people know what tyrants some retarded or psychotic children can be or how their tyrannical behavior isolates them from normal environments.
>
> (Lovaas 1981, 24–5)

Of course these behaviors are upsetting and any parent who is told that this is their child's future is certain to have many sleepless nights. But are punishments really the answer? Apparently, they are:

> State hospitals are full of children who could have made it on the outside *had it not been for the fact that they were allowed to develop self-defeating behaviors such as excessive aggression*. Often, parents of such children have been aided by some well-meaning, but probably misinformed, professional who was more concerned with defending abstract ideals about the perfect society (where no aversives exist), rather than helping persons cope with mundane, everyday practical problems of how to live with an *angry*, retarded individual.
>
> The behaviors mentioned above—self-injurious behaviors, aggressive attacks on others, and other behaviors such as feces smearing…are all behaviors that pose an immediate threat to the child's survival and…*aversives should be used to stop them.*
>
> (Lovaas 1981, 25, emphasis added)

There is a lot packed into Løvaas's image-rich descriptions: first, a grim life in a state institution is not the exception but to be expected given that state hospitals are "full of children" who exhibit "excessive aggression"; second, anyone who tells you otherwise is "well-meaning" but, unlike Løvaas, misinformed; third, small violent autistic toddlers turn into large, terrifying, violent adults; fourth, autistic emotions are limited to anger and murderous jealousy; and, finally, this nightmare is *entirely avoidable* if only parents would gird their loins and punish their autistic child severely each and every time the child smears feces or self-harms. Notice, too, Løvaas's paternalistic dismissal of alternatives to behavioral modification is echoed by Margaret Anderson at the start of this chapter: the world we live in is cruel and hostile to autistics, and behavioral "interventions" are the only way we can possibly hope to keep autistic children safe from violent bullies, stigmatizing parents, and life in the "less optimal wards" of the local state institution.

Although *The ME Book* was ostensibly about a variety of developmentally disabled children, autistic children were prominently and repeatedly identified as exactly the kind of disabled child who benefited from behavior modifications punctuated with severe punishments. And the photos on the cover of the book were the same photos of autistic children included in the "Screams" article. There is no doubt that Løvaas's characterizations of violent, feces smearing children furthered the narrative of autistic behaviors as burdensome and debilitating.

Let's set aside images of lumbering autistic adults covered from head to toe with feces for a minute and consider fecal smearing (referred to as *scatolia* in medical journals) dispassionately.

First, feces smearing is common in neurotypical toddlers and there are countless websites designed to reassure parents that such behavior is a normal, albeit unpleasant, part of early childhood development (NHS 2017). Many of the websites use gentle humor to ease parental anxiety while stressing that any kind of punishment is exactly the wrong response as it may worsen the smearing. In stark contrast, websites aimed at parents of autistic children adopt a far less jovial tone and refer to fecal smearing as *yet another* "challenging" autistic behavior (Total Care Therapy 2024b).

Many explanations are offered to explain why toddlers smear feces. One is that toddlers find the texture of feces fascinating and are not disgusted by its smell because the disgust reaction does not typically develop in children until around age four. It has been hypothesized that autistic children do not develop a disgust reaction until a few years later, with some not developing it until they are eight or nine years old.

Medical conditions such as severe GI distress, chronic constipation, protozoal infections and PICA may prompt children to smear their feces. Websites aimed at parents of neurotypical children assure parents that all of these conditions are easy to treat, and they encourage parents to seek professional medical assistance for help. Websites aimed at parents of autistic children suggest that parents invest in specially designed "restrictive clothing" and "compression underwear" to stop "wandering hands" from accessing feces (Friendship Circle 2023).

Finally, fecal smearing and fecal soiling can be signs of trauma and sexual abuse (Mellon, Whiteside, and Friedrich 2006). Given how prevalent physical and sexual abuse is among autistic children with studies reporting that autistic children are *five times as likely* to be abused by teachers and aides while at school as neurotypical children are, it seems plausible to suppose that at least some instances of fecal smearing by autistic children is a

sign of their abuse.[32] In fact, some parents only discover that their non-verbal autistic child has been subjected to abuse while at school after the child starts smearing their own feces (Farmer and Neier 2009). Certainly the fact that the children Løvaas described were very young or had spent most of their lives in full restraints in state institutions is significant as both facts would more usefully explain their fecal smearing than does simply pointing to their autism.

In short, feces smearing is an unpleasant but not altogether unusual behavior for humans that is caused by a variety of reasons, some developmental, some medical, some situational and some psychological. And, while some autistic children smear feces, categorizing feces smearing as an "autistic behavior" rather than a human behavior, is entirely unwarranted.

As to violent self-harm, the situation is far more nuanced than how Løvaas presented it. Self-injurious behaviors (SIBs)[33] are "a class of behavior, often highly repetitive and rhythmic, that result in physical harm to the individual displaying the behavior" (Fee and Matson 1992). SIBs include, but are not limited to, biting, hair pulling, head-banging, and skin picking and scratching (Minshawi et al. 2014). Recent research has shown that 30% of autistic children engage in SIBs (Shkedy, Shkedy, and Sandoval-Norton 2019) whereas 8% to 11% of non-autistic children engage in SIBs (Blanchard et al. 2021), depending on age and gender.[34]

The current thinking on SIBs is that they result when an individual has difficulty regulating extreme negative emotions and physical and/or psychological pain (Skegg 2005). Individuals who engage in SIBs may be competently verbal but lack the communication and coping skills to effectively express their sense of deep hopelessness. Thus SIBs are standardly interpreted as a "cry for help" and, once psychologists are aware of *any* SIBs, established treatment protocol is to "help identify pain, ameliorate pain, and improve the client's coping and communication skills" (Shkedy, Shkedy, and Sandoval-Norton 2019).

According to Shkedy et al., standardized treatments "work wonders" for non-autistic individuals who engage in SIBs, yet "many professional and paraprofessionals *neglect best practices* and attempt to differentiate SIB in the autistic population, as if it were an entirely different symptom or psychosis" (2019, emphasis added). Is there any reason to believe that autistic SIBs are essentially different in kind from non-autistic SIBs? Apparently not. Shkedy et al. explain:

> While it may be surprising to some, the reasons why someone with ASD may engage in SIBs *are the same reasons* why an individual without ASD may engage in SIBs mentioned above (i.e. pain, inability to communicate)….Research has been fairly transparent that a high proportion of children with ASD with severe impairment use challenging behavior as a form of expression, and even if the behavior is ignored, the child will still engage in SIB in order to *try to communicate*.
>
> (2019)

Autistic individuals who engage in SIBs are typically treated with ABA-based approaches that rely on the use of aversives. Unsurprisingly, since ABA addresses behaviors only and not the motivations underlying those behaviors, ABA-focused treatment for autistics who engage in SIBs is woefully inadequate. In fact, evidence shows that responding to SIBs with aversives—which is the go-to move for ABA therapy—not only increases the incidence of SIBs but also the severity of SIBs among autistics.

Why are autistics being subjected to ineffective and damaging aversives for "extreme" stimming, such as feces smearing and self-injurious behaviors, rather than being offered well-established medical and psychological therapies that have been proven to work? I think the primary reason is because autistics have been thoroughly "othered" by Løvaas and the ABA industry for over six decades so it simply does not occur to people to consider that these could be anything other than "autistic behaviors", behaviors which are, to use Løvaas's words, "bizarre", "violent" and "unproductive". Once you see an autistic toddler as "bizarre", as Løvaas insisted they are, then why would you regard an autistic's head-banging as a cry for help rather than a reason to give him a hard slap? This double standard does serious harm to autistics: it causes trauma, increases stress for parents and family, stigmatizes autistics, and incites bullying and anti-autism violence. It also normalizes the use of *extreme aversives* on autistics who engage in so-called extreme self-injurious behaviors. It should be unsurprising, then, that electric shock devices—the most extreme of the extreme aversives ABA therapists have used on autistics—are still being used on institutionalized autistic children to deter self-injurious behavior and these devices are deemed by those committed to ABA as the "only way" to reduce those autistic children's "extreme self-injurious behavior" (Satcher 1999, 163–64).

7.4 The Graduated Electronic Decelerator

In 1950, when Matthew Israel was a freshman in college, he read *Walden Two*. Inspired by the notion of a utopian society that uses rewards and punishments to improve its members, Israel decided to make that utopia a reality. Israel earned a Ph.D. in psychology at Harvard, working with B. F. Skinner and studying operant conditioning. Determined to have his utopia, Israel decided to found a residence that included only developmentally disabled autistics whom he could punish and reward to improve their behavior. The Behavior Research Institute (BRI) in Providence, Rhode Island, had its first two students in 1971, one of whom was an autistic teenager (Kix 2008).[35]

Initially Israel relied on strong aversives such as slapping and pinching, just as Løvaas did years earlier. Some years later a *Los Angeles Times* journalist asked Israel if he personally had pinched the feet of Christopher Hirsch, an autistic twelve-year-old student at a sister branch of BRI in Northridge, California, "at least" 24 times in 30 minutes as punishment for soiling his pants. Israel's answer reveals a disturbing capacity to disassociate from his own horrific actions:

> It might have been true…It's true that pinches *were being used* as an aversive. The pinch, the spank, the muscle squeeze, water sprays, bad taste—all those procedures *were being used*.
>
> (Gonnerman 2007, emphasis added)

Israel used other strong aversives on the autistic children who resided in his institutes, including sticking ammonia pellets into their nostrils, white-noise helmets, bed-boards that restrained children, spread-eagled, face-down onto their beds, and strapping children to chairs with ankle and wrist cuffs.[36] Israel energetically marketed BRI. He presented fraudulent "before" and "after" images of children to persuade parents of how successful the school was. Playing on exactly the same narrative created by Løvaas—that autistic children

were monstrous and violent and in need of constant and painful discipline—Israel convinced parents that BRI was the only school in the country that would bring an end to their child's terrifying self-injurious behaviors. Then students started dying from injuries that directly resulted from the torturous aversives they were being subjected to dozens—sometimes hundreds—of times every day (Nisbet 2021).

Concerned with student deaths at BRI, the Massachusetts Office of Children issued an order to close the institute in 1985 (Kix 2008). Israel appealed the closure of BRI and counter-sued the Office of Children. Initially, a court decided that BRI could remain open but could no longer use aversives. Israel appealed the decision, insisting that he simply could not run BRI without aversives—aversives, after all, are the whole point of the school since, according to Israel, they are the only way to eliminate self-injurious behaviors. Israel insisted that if the students were not shocked, they would "regress". To bolster his case, Israel brought to court the "most terribly self-abusive students" and displayed them before the judge (Kix 2008). Judge Ernest Rotenberg sided with BRI, declaring that BRI could remain open and continue to use aversives. BRI later changed its name to the Judge Rotenberg Center (JRC) to honor the judge. Not long after, another student died.[37]

7.4.1 Judge Rotenberg Educational Center, Inc.

Shortly after that latest death, Israel decided that the aversives JRC had been using were inadequate because, he reasoned, the pain was not inflicted immediately, painfully or consistently enough. Israel then started using the Self-Injurious Behavior Inhibiting System (SBIS). The SBIS is a device attached to the student's leg or arm and delivers an electronic shock when the child self-injures, for example when they hit themselves or bang their head against something. Because the device triggers the shock immediately after the student hits themselves, there is virtually no delay between the self-harm and the painful shock. Allegedly, the SBIS feels like a "hard slap of a rubber band". JRC used the SBIS on their students for just over a year when Israel decided that the SBIS devices were not good enough. One student, a so-called serious self-injurer, was shocked an astonishing 4000 times by an SBIS device in one day—and yet he continued to self-injure. Rather than give up on the idea of using electric shocking devices to eliminate self-injurious behaviors, Israel decided to design his own machine, one that would inflict shocks ten times stronger and twenty times longer than the SBIS. Israel's Graduated Electronic Decelerator (GED) was completed and ready for use in December of 1990.

The Food and Drug Administration (FDA) approved the use of the GED in 1994. But by 1992 Israel had already redesigned the GED so that it could deliver a shock much more powerful than the original GED. The United Nations has declared Israel's GED a torture device (Pilkington 2018).

7.4.2 FDA FR 13312, Banned Devices; Electrical Stimulation Devices for Self-Injurious or Aggressive Behavior

On March 6, 2020, the Food and Drug administration (FDA) announced Final Rule 13312, which banned the use of electronic stimulation devices (ESDs) to treat self-injurious behavior (SIB) and aggressive behavior (AB). The FDA summarized the purpose of the rule:

> The medical literature shows that ESDs present risks of a number of psychological harms including depression, post-traumatic stress disorder (PTSD), anxiety, fear, panic,

> substitution of other negative behaviors, worsening of underlying symptoms, and learned helplessness (becoming unable or unwilling to respond in any way to the ESD); and the devices present the physical risks of pain, skin burns, and tissue damage.

And:

> In light of scientific advances, out of concern for ethical treatment, and in an attempt to create generalizable interventions that work in community settings, behavioral scientists have developed safer, successful treatments for SIB and AB. The development of the functional behavioral assessment, a formalized tool to analyze and determine triggering conditions, has allowed providers to formulate and implement plans based on positive behavioral techniques…Positive-only approaches have low risk and are generally successful even for challenging SIB and AB, in both clinical and community settings. The scientific community has recognized that addressing the underlying causes of SIB or AB, rather than suppressing it with painful shocks, not only avoids the risks posed by ESDs, but can achieve durable, long-term benefits.
>
> (FDA 2020)

Noting in the final rule that *only one institution in the entire United States* would be impacted by this rule—the Judge Rotenberg Center—the FDA stated, "[A]s explained in the comment responses about the state of the art, the professional field, *with the sole exception of JRC*, has moved beyond the use of ESDs for SIB or AB" (FDA 13317, emphasis added).

When the FDA had initially proposed the rule to ban ESDs on April 25, 2016, 1,276 public comments were posted on the Federal Register's website (FDA 2016). The "overwhelming majority" were in favor of the ban, citing medical studies, professional opinion, as well as personal experiences of being shocked by the GED devices (FDA 2020, 13323–24). Those comments opposed to the ban were from JRC and people affiliated with JRC. In one comment JRC wrote:

> JRC has not found any side effects associated with aversive conditioning except the occasional discoloration of the skin that disappears within an hour to a few days and some brief, temporary anxiety just prior to the delivery of the application.
>
> (FDA 2020, 13324)

The FDA was unpersuaded. In its Final Rule Executive Summary the FDA stated:

> According to the Investigation Report, an individual reported waking up because his roommate was screaming; his roommate had been asleep but was shocked by a GED, waking him and causing him to scream. JRC staff reported that "the skin was off of the area" of the leg where GED shocks had been applied, that the GED was removed from the leg "because the area was too bad to keep the device, and either the individual who receives the shocks or the staff believed a stage 2 ulcer had developed.
>
> (FDA 2020, 13323)

Another comment by JRC accused the FDA of overstating the level of pain caused by the GED. The FDA responded:

> …[B]ased on information submitted in comments, FDA believes it *understated the harm of pain* in the proposed rule. For example, one clinician, Dr. Edwin Mikkelsen, testified in the Massachusetts hearing that the shock was excruciatingly painful and should not be used on humans, that it was unconscionable, and that it prompted the doctor to resign from the Level III certification team…Another clinician, Dr. James McCracken, stated that "[t]his shock is intense. It is not a simple tickle or a buzz. It is frightening."…Dr. Jennifer Zarcone, another clinician, described the shocks as "very painful, and I got very upset. It's probably the most painful thing I've ever experienced."… In short, FDA does not believe that the pain from the shocks from ESDs currently in use is actually modest for the individuals subject to them.
>
> (FDA 2020, 13324)

The FDA's ban on the use of ESDs to treat aggressive behaviors and self-injurious behaviors went into effect on April 6, 2020.

It seemed that the long saga of using extreme aversives to punish autistic behaviors was finally over.

7.4.3 Judge Rotenberg Educ. Ctr., Inc. v. U.S. Food & Drug Admin., 3 F.4th 390 (D.C. Cir. 2021)

In response to the FDA's ban on ESDs to treat SIB and AB, the JRC sued the FDA, claiming that the agency had exceeded its authority. In a 2–1 decision, the Circuit Court of the District of Columbia agreed with JRC, concluding that the FDA did not have the authority to ban a medical device for a "particular use", such as shocking students who exhibit SIBs, as doing so would "limit or interfere" with a physician's authority to prescribe or administer an otherwise legally marketed medical device.

The court's decision is short, barely over six pages long, and begins with a "factual background" that alternates between grisly images of impaired children engaging in "extreme" SIBs familiar to anyone who reads ABA descriptions of autistics, and an anodyne account of JRC's use of ESDs. The court writes:

> The Judge Rotenberg Educational Center is a facility in Massachusetts that treats patients with severe mental disabilities. The Center admits patients that other facilities could not successfully treat. According to the Center, some of its patients suffer from several self-injurious and aggressive behaviors that are *difficult or impossible to treat using conventional behavior and pharmacological techniques*. The most common self-injurious behaviors include head-banging and self-biting. The behaviors of some patients are extreme enough that they have suffered self-inflicted brain trauma, broken and protruding bones, and blindness.
>
> Before the ban at issue in this case, the Center treated some of its patients exhibiting severe self-injurious or aggressive behavior with an electrical stimulation device. The device, called a graduated electronic decelerator, *briefly shocks* patients *causing them to*

> *reduce or cease their self-injurious behaviors*…The Center manufactures its own devices. The Center treats approximately 20% of its patients with this treatment at any given time.[38]

The court's description of JRC's use of ESDs is entirely disconnected from reality. It states that the shocks are "brief" but fails to discuss the intense pain and harm they cause, or that ESDs are used on children as young as seven years old. The court implies contrary to all evidence that using ESDs succeeds in reducing—even ending—SIB and AB, yet fails to question why, despite the alleged efficaciousness of ESDs, 20% of the students at JRC have to wear the devices "at any given time". Nor does the court explain why the children must be shocked hundreds or even thousands of times a day, even while they sleep (Kix 2008). More astonishingly, the court accepts without question that, despite the fact that no other institution in the entire country uses ESDs on children with disabilities, JRC cannot treat these children without using ESDs.

The Court's legal analysis in *JRC* hinges on its interpretation of two Congressional statutes: 21 U.S.C. § 360f, which authorizes FDA to ban medical devices, and 21 U.S.C. § 396, which prohibits the FDA from regulating the practice of medicine. Their interpretation of these two laws is bizarre and seemingly motivated solely to undermine the FDA's authority to ban dangerous medical devices.

§ 360f states:

> Whenever the Secretary finds … that (1) a device intended for human use presents substantial deception or an unreasonable and substantial risk of illness or injury…he may initiate a proceeding to promulgate a regulation to make such device a banned device.

According to the court, Congress requires the FDA to evaluate the "reasonableness" of a medical device's risks when considering whether to ban a device. The court noted that Section 360F does grant FDA the legal authority to decide whether or not using a given medical device creates an unreasonable risk to the patient. However, the court also claims that Congress requires that FDA bans of devices be outright and not "in some uses", which is precisely what the FDA had done in its rule banning the use of ESDs for treating AB and SIBs.

§ 396 states:

> Nothing in this chapter shall be construed to limit or interfere with the authority of a health care practitioner to prescribe or administer any legally marketed device to a patient for any condition or disease within a legitimate health care practitioner-patient relationship.

Considering § 396, the court considered two issues: first, whether an ESD ban for treatment of SIBs or ABs *only* would "limit or interfere" with a physician's authority to prescribe or administer an ESD, and, second, whether the ESD banned for treating SIBs or ABs remains "legally marketed"? As to the first question, the court held that a use-specific ban *does* "limit or interfere" with how a practitioner uses the device precisely because a practitioner is being prevented from using a ESD to treat SIB or AB—the very point of the FDA ban, after all. As to the second question, the court determined that, even if the ESD was banned for one purpose only, an ESD would still be a "legally

marketed" device, that is, a legally available device, since the FDA is not banning its use for *other* purposes. This fact, too, then interferes with a practitioner's authority to prescribe an ESD because, effectively, the FDA is telling practitioners that they may prescribe ESDs in some situations only but not others, and is thereby limiting and interfering with a physician's authority—the very thing § 396 was intended to prevent the FDA from being able to do.

The court's interpretation of these statutes is odd. After all, why would Congress grant the FDA the power to ban dangerous medical devices if exercising that power is necessarily beyond the scope of the FDA's authority? Effectively the court is arguing that the FDA can only ban medical devices if there is no legitimate use for them, which would likely mean that the FDA could never ban any medical device given that it is always conceivable that even the most dangerous device could be medically beneficial in an extremely limited and specific context.

The court vacated the FDA's rule banning the use of ESDs to treat SIBs and ABs. As of June 6, 2021, JRC was back in the business of shocking its students.

7.4.4 FDA PR 20882, March 26, 2024

All was not lost. On December 29, 2022, Congress enacted the Food and Drug Omnibus Reform Act (FDCA) of 2022 which expressly stated that FDA's authority to ban a device "includes the authority to ban a device for one or more intended uses…under section 1006 of the FD&C Act".[39] In other words, Congress expressly granted the FDA the legal authority to ban ESDs for a single purpose, such as for treating SIB and AB exhibited by children with disabilities.

Fifteen months later, on March 26, 2024, the FDA announced Proposed Rule 20082, which would "ban electrical stimulation devices (ESDs) intended for self-injurious behavior (SIB) and aggressive behavior (AB)" (FDA 2024). The FDA justified their authority to propose this rule by pointing to the Food and Drug Omnibus Reform Act of 2022. The deadline for public comments in response to this proposed rule was May 28, 2024. At the deadline, 8717 comments had been submitted—almost four times as many as were submitted in response to the FDA's first attempt to ban ESDs. At the time of writing this chapter, the comments have not been made public. But it seems likely the overwhelming majority of the comments will favor the complete ban of ESDs to treat SIBs, and those comments opposed to the ban will have been submitted by JRC personnel.

Now, we wait. We wait for the FDA Final Proposal which will effectuate a ban on ESDs. And then we wait for JRC's response, which likely will be another attempt derail the FDA ban of ESDs so they can continue to shock their students. In the meanwhile, until the FDA proposed rule becomes final, autistic students at JRC who exhibit "extreme autistic behaviors" are being subjected to excruciatingly painful shocks, burns, bruising and emotional trauma for exhibiting "extreme behaviors" which are exacerbated by the ESDs.

7.5 Recovering From ABA Therapy

It is not hyperbole to describe the early ABA experiments on autistic children as medical atrocities: pre-schoolers were subjected to painful and distressing "aversives" that are now known to cause long-term trauma; parents were manipulated into consenting; the research

methodology was unscientific; the published results were fraudulent and the benefits of the "treatment" were exaggerated. And, perhaps worst, the identities and images of the preschool-aged subjects were repeatedly publicly revealed and their characters described in dehumanizing language.

There is no way to undo the past. But that does not mean there is nothing that should be done. To start with, there should be acknowledgement of the unscientific and abusive treatments the autistic children who were part of the UCLA Young Autism Project experienced. Also, those children should receive reparations for the immediate and long-term harms they suffered. The UCLA Young Autism Project should become a textbook example of how not to experiment on vulnerable populations, and how not to advocate for a new and, seemingly, revolutionary treatment protocol.

It is also well past time for contemporary ABA advocates to cease using degrading and dehumanizing anti-autistic stereotypes to motivate parents to seek out early ABA therapy for their autistic children because those stereotypes misdescribe the behaviors, potential, and value of autistic children. Every time an ABA advocate relies on scare tactics to justify the need for ABA treatments for autistic children, those ABA advocates perpetuate the anti-autistic ideology that began with Løvaas.

And, it is the ABA advocates who are ideally poised to dismantle the anti-autistic narrative early ABA ideologues created. ABA advocates could: demand that the UCLA Psychology Department website that presently lauds Løvaas include acknowledgement of the harms his experiments caused; they could launch a nation-wide public information campaign on the role ABA has played in sustaining an anti-autistic narrative for over 60 years; and, most importantly, ABA therapists could self-regulate their profession so as to ensure all those who claim to defend, advocate for, or offer ABA to treat autistics also explain its likelihood to cause long-term harm and the complete lack of verifiable evidence that ABA provides long-term benefit for autistic individuals. Such efforts would go a long way to diminish the prevalence of dehumanizing stereotypes about autistics currently permeating our society and would provide real support for autistics, a goal to which ABA advocates claim they are committed.

A final thought: just as I finished the edits for this chapter, autism is again in the news. Health and Human Services Secretary Robert F. Kennedy Jr. made headlines after making the following remarks at an HHS press conference:

> Autism destroys families, and more importantly, is destroys our greatest resource, which is our children…They'll never pay taxes, they'll never hold a job, they'll never play baseball, they'll never write a poem, they'll never go out on a date. Many of them will *never use a toilet unassisted*.
>
> (Braun-Silva 2025, emphasis added)

Depressingly, but predictably, Kennedy presented autism as a terribly debilitating condition, a life of unrelenting inabilities, missing-outs, and not-being-able-tos with a big dose of incontinence thrown in to underscore the horribleness. Once again we see autism presented as not simply sad, but as disgusting. The sole purpose of Kennedy's comments was to cause fears—a fear of autism, a fear of autistics, and a fear of the image of our society increasingly populated with autistics unable to do all the things—playing baseball and paying taxes—that make our life worth living and make us citizens worth living with. Kennedy's

rhetoric echoes the very same anti-autism rhetoric that this chapter traced back to Løvaas. Its elimination is long overdue.

Notes

1 While many disability scholars prefer the "Person First" practice of "X is a person with a disability" or "X has a disability," autistic rights advocates prefer the "identity language" of "X is autistic" which is analogous to sex, race and sexual minority identity language such as "X is female," "X is Hispanic," and "X is bisexual." I use identity language such as "is autistic" and "autistics" rather than "X has autism" throughout this chapter.

2 Frank Klein first used the elephant/armadillo illustrative analogy in "ABA Proponents Attack Autistics: Showing Their True Character" (2004).

3 I suspect that "in the mean time" was meant to be written as "in the meantime" but, given the frequency of headlines featuring anti-autism bullying and violence, this is indeed a "mean time" for autistic individuals.

4 This last point is not made explicitly in the quote above, but defending that claim is the larger purpose of Margaret Anderson's book from which the quote was taken.

5 Prior to 2001, neither commercial health insurance companies nor Medicaid covered therapy services to treat autism. By 2019, all 50 states had passed health insurance requirements for therapy services for autism. Meanwhile, the Affordable Care Act (ACA) requires its marketplace health plans to cover behavioral health, including autism treatment. Also in 2014 the Centers for Medicare and Medicaid Services (CMS) clarified that all state Medicaid plans must cover the costs of treatments for autism. The therapy services for autism covered are almost always ABA-based therapy services. See Appelbaum et al. (2023).

6 It is still the case that older teens and adult autistics who criticize ABA find their autistic identities doubted. Or, they are accused of being "autistic elites" (in virtue of being able to communicate) and so inappropriate spokespersons for less competent (presumably non-verbal and/or very young) autistics. Both accusations are bizarre: the first implies that no autistics are capable of effectively discussing their traumatic experiences (or, even stranger, that no autistic individual has had a traumatic experience caused by a therapist—a naïve assumption at best) and the second implies that neurotypical people are more reliable narrators of the experiences of autistics than autistics are. For one example of this discussion, see Fahrenheit (2020).

7 Treatment options for older teens and young adults vary dramatically from state to state, and from county to county within a state. The state of Michigan, for example, requires counties to provide therapy services for autistic adults until they are 26 years old. However, counties determine the budgets for those programs and some counties provide very few services that are safe or of adequate quality.

8 Alison Singer, president and co-founder of the Autism Science Foundation, claims that "[t]he truth is that, for some people, autism may be a gift, while the simultaneous truth is that for other people autism symptoms are a *tremendous burden*, a lifelong disorder, for which society should seek understanding, *prevention, and medical intervention.*" Emphasis added, see Winter (2024). Singer does not explain how she envisions *some* autistics—the burdened and burdensome—*but not all* autistics, being "prevented." This "autism culling" fantasy, where all and only the burdensome autistics are magically eliminated, is a constant theme for those who pine for the day when medicine has a treatment for autism. For a further discussion of autism culling, see Jami L. Anderson (2012).

9 Throughout this chapter, I use the term "autistic advocates" to include those individuals who usually, but not always, self-identify as autistic and work to advance civil and social rights for autistic individuals. Often, autistic advocates identify as autistic and neurodiverse, and may advocate for neurodiversity. Because this chapter focusses solely on autism and not on the larger neurodiverse community, I will restrict the conversation to autism advocates.

10 By "ABA advocates" I mean anyone who declares ABA therapy as an important and necessary treatment for autism. ABA advocates may be parents of autistic children, teachers or administrators who work with ABA therapists, private equity companies that have purchased and profit from ABA therapy services covered by federal and state funds, institutions that financially benefit from licensing and certifying ABA therapists and, of course, the licensed or certified ABA therapists.

11 When telling of his first encounter with an autistic child he met through UCLA's Neuropsychiatric Institute, Ivar Løvaas said, "As if in a dream, I had found the ideal persons to study." See Herman (2019).
12 There were researchers who regarded autistics as having happier prognoses. In an article describing the progress of the eleven autistic children he had studied six years earlier, Leo Kanner claimed that autistic children benefited from therapy and parental love and support. See Kanner (1971). Hans Asperger described autism as presenting both deficits *and benefits*, both for the children but also the community as a whole that chooses to nurture and support those children. In a conversation with Lorna Wing, Asperger stated, "We claim—not on theoretical grounds but from the experience of dealing with many children—that this [autistic] boy's positive and negative features are two *naturally necessary, connected aspects* of what is really a homogenously laid-out personality. We can also express this as follows: the difficulties which this boy experiences with himself, as well as with his relationship to the world are the price he has to pay for his special gifts" (Feinstein 2010, 17). At a public lecture in 1938, Asperger told his audience that "We must never give up on the education of abnormal children, based on the knowledge that, in these people, all of a sudden—at puberty, for example—there may appear strengths and capacities which we would not have suspected existed in these children or we could not have foreseen would have been of any importance" (Feinstein 2010, 17).
13 In the 1950s and 1960s, institutionalized autistic children and adults were subjected to frequent and brutal physical and sexual abuse, with rates estimated at 39% to 75% (Smith 1996, 45–59).
14 The working theory was that, since autism was a kind of "personality," a treatment designed to alter that defective personality (in so far as treatments would alter the person's "perceptive state") would be efficacious. To some, LSD-25 seemed the obvious choice for altering that autistic personality. One study subjected fourteen autistic children to daily heavy doses of LSD-25. No non-autistic children were included in the study. Those under age 10 became "gay and playful." Two children over age 11 "reacted with disturbed anxious behavior" and were dropped from the study. There is no evidence that these treatments provided any long-term benefits to the young autistic children (Bender et al. 1962).
15 Although ECT is still used to treat autism, only one study has claimed that ECT was beneficial for treating autism. This study concerned the use of ECT on *a single autistic boy*. The researchers claim to have seen significant improvement in his behaviors, specifically a reduction in the occurrence of self-injurious behaviors. However, the article did not describe in any detail the nature of the self-injurious behaviors or what triggers prompted those behaviors. Nor did the study discuss whether or not other aspects of his autism improved. Nor did the researchers provide evidence that the child experienced long-term benefits from the treatment or that the reduced number of self-injurious behaviors remained in effect after the ECT treatment was discontinued. No other study has shown positive results in the use of ECT for treating autism (Wachtel et al. 2009).
16 These first three behaviors were identified by Kanner in his study of eleven autistic children more than a decade earlier (Kanner 1971). For a critical analysis of Kanner's theory of autism, see Cushing (2012, 17–45).
17 In the DSM-IV, one autistic trait identified is "Delays or abnormal functioning in…(3) symbolic or imaginative play" (DSM-IV, 1994, 71). In the DSM-5, play was mentioned only a possible situation in which "deficits in nonverbal communicative behaviors used for social interaction" may manifest. Thus, the "odd" autistic play is not an autistic trait, but instead it is the communication deficits that become evident during play that is the autism trait. Interestingly, the DSM-5 implies that autistic individuals do play, a claim that Løvaas repeatedly denied (DSM-5, 2013, 27–31).
18 The term "full blown autism" is another term still used but is meaningless except insofar as it signals that the autistic person is a serious problem and will not benefit from therapy.
19 In this article, Løvaas contrasted his study with Michael Rutter's. "[O]nly 1.5% of [Rutter's] group (n = 63) had achieved normal functioning. About 35% showed fair or good adjustment, usually required some degree of supervision, experienced some difficulties with people, had no personal friends, and showed minor oddities in behavior. The majority (more than 60%) remained severely handicapped and were living in hospitals for mentally retarded or psychotic individuals or in other protective setting" (Lovaas, 3). For Rutter's original article describing his research in full see Rutter (1974).
20 ABA program websites and therapists report that divorce rates for parents of an autistic child are as high as 87%—dramatically higher rates than for couples who do not have an autistic child. The

implication is clear: the autistic child destroys marriages. Yet empirical evidence does not support that fear-mongering statistic. In fact, the divorce rate for couples with an autistic child is closer to 23.5%. For a careful analysis of the complicated factors that influence divorce rates of parents of autistic children, including age, race and economic status of the parents (Hartley et al. 2010).

21 ABA-based programs use varying language, like DTT (Discrete Trial Training) and IBI (Intensive Behavioral Intervention). Advocates of each program insist there are differences but it is very difficult to tell the programs apart since they all advocate starting at a young age, require at least 40 hours a week of 1:1 therapy, and all use behavior modification techniques to eliminate "negative" (*nee* pathological) behaviors, a.k.a. "autistic behaviors." They also point to Løvaas's studies as evidence of the value of ABA-based therapy for autism.

22 Autistic therapy programs designed for adults of any age are rare largely because, I suspect, ABA programs have convinced the public that only young autistic children can be normalized by ABA therapy and that no other therapy program benefits autistic individuals. As a result, tremendous resources are devoted to ABA programs for pre-schoolers leaving precious little support for autistic adults.

23 They also claim, just as Løvaas did, that it is the parents, not the ABA therapists, who are "the real therapists" for the children. They describe themselves as *supports* for the parents who do the heavy lifting of treating their child.

24 ABA websites used language that assumes that parental roles reflect traditional gender norms and so are written as if the mother is the primary therapy manager. The recently coined term "Autism Mom" implies that the female parent's identity is constituted by her role as an autistic child's primary support. Urban Dictionary's top definition of "Autism Mom" is "A mother of an autistic child. Often considers herself a superhero for raising an autistic child, victimizes herself, and expresses negativity or grief about her child's condition. Likely supports Autism Speaks and the puzzle piece (both offensive to autistic people)" (Urban Dictionary n.d.).

25 Some ABA/EIBI programs are strongly opposed to punishments (Journey ABA 2022).

26 This is a recent development, as just under twenty years ago when my son was diagnosed as PDD-NOS, all ABA therapies I researched were skeptical of or at most agnostic about biological causes of autism.

27 The fact that the terms are debunked does not prevent therapy centers using the terms on their websites. For one example, see the Thriving Wellness Center use of the term on their "High Functioning Autism Checklist" (Thriving Wellness Center n.d.).

28 One meta-analysis of EIBI outcomes concluded that "there is weak evidence that EIBI may be an effective behavioral treatment for some children with ASD." The researchers acknowledged that their conclusion are tentative because ABA reports are non-randomized and rely on highly biased sources, such as assessments made by therapists and parents—again, the same muddy research standards Løvaas used (Reichow et al. 2018). There is good reason to be skeptical of the claim that EIBI successfully eliminates self-stimulatory behaviors. When autistics are directly asked if they still "feel autistic" (which is defined as feeling the desire or urge to stim) they overwhelmingly state that they *always* "feel autistic" and must fight the urge to stim or keep their stimming behaviors hidden to avoid censure (Reichow and Wolery 2009).

29 For just a few examples, see Total Care Therapy (2024a) and Above and Beyond Therapy (2024).

30 ABA advocates are presenting a false dilemma: no autistic advocate claims that autistic individuals never need supports. In fact, many claim that autistics benefit from extensive supports and services that are genuinely beneficial.

31 There are other examples but these are common. See Very Well Health (2025).

32 See Andrzejewski et al. (2023); Fisher et al. (2019); McDonnell et al. (2022).

33 Some researchers refer to these behaviors as "NNSIs"—nonsuicidal self-injurious behaviors. Both terms are used in the literature to refer to repetitive, self-stimulatory behaviors that cause injury to oneself.

34 One study that interviewed children and teens found that "9.0% of girls and 6.7% of boys reported NSSI engagement; 7.6% of third-graders, 4.0% of sixth-graders, and 12.7% of ninth-graders reported NSSI engagement. There was a significant grade by gender interaction; girls in the ninth grade (19%) reported significantly greater rates of NSSI than ninth-grade boys (5%). Behavioral methods of NSSI differed by gender. Girls reported cutting and carving skin most often, whereas boys reported hitting themselves most often" (Barrocas et al. 2012).

35 Israel liked to boast, "No matter how big, how old, how disgusting the student, we won't say no." See Plummer (1986).

36 This "white noise helmet" was a "therapy" device Israel designed and crafted himself. When wearing the white noise helmet, the student is restrained to a chair with hands and feet tied by plastic cuffs, their face masked, and forced to listen to the helmet's earphones which emit "white noise." In 1985, Vincent Milletich, a 22-year-old autistic man, died of asphyxiation after having a seizure while wearing the helmet. At a hearing investigating Milletich's death, Judge Paul E. Ryan stated that Israel "was negligent in authorizing the use of this helmet without having an expert in helmet construction design the helmet or subject it to a safety inspection." Extraordinarily, no charges were brought against Israel because, according to Judge Ryan, "there was no evidence the treatment caused the student's death" (New York Times 1987).

37 The student was Linda Cornelison, an intellectually impaired, non-verbal student who, on the way to school, started clutching her abdomen in pain. The nurse at the Attleboro BRI assumed Linda was malingering (one of Israel's mottos was that the students always lied) and ordered her back to class, where staff subjected her to "13 spatula spankings, 29 finger pinches, and 14 muscle squeezes, and five times forced her to inhale ammonia." She died the next day from a gastric perforation (Dietz 1985).

38 Judge Rotenberg Educ. Ctr., Inc. v. U.S. Food & Drug Admin., 3 F.4th 390 (D.C. Cir. 2021), 393, emphasis added.

39 The Food and Drug Modernization Act of 1997 (FDCA) § 396 states "Nothing in this chapter shall be construed to limit or interfere with the authority of a health care practitioner to prescribe or administer any legally marketed device to a patient for any condition or disease within a legitimate health care practitioner-patient relationship."

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8

AIN'T MISBEHAVIN'

Scrapping Applied Behavior Analysis

Dani Maskit and Barbara Fultner

8.1 Introduction

The most common intervention used on Autistic children in the United States is so-called Applied Behavior Analysis (ABA), though Autistic advocates often refer to it as Autistic Conversion Therapy. Writing as an Autistic activist diagnosed in adulthood and as a feminist philosopher, we are interested in both the theoretical underpinnings of ABA and its practical consequences. We believe the former to be deeply flawed and the latter harmful. The core theory underlying ABA is Skinnerian behaviorism. Since behaviorism explicitly holds cognitive processes to be irrelevant to either understanding or modifying a person's behavior, we argue that ABA is not only in tension with neurocognitivism, but, more importantly, is in principle incompatible with the Neurodiversity Paradigm (Walker 2021) and hence with respecting Autistic Identity. According to the neurodiversity paradigm, Autism is a naturally occurring, and valuable, difference in neurocognition (Yergeau 2017; Chapman 2019; 2024; Walker 2021; Catala 2024).

Genuinely respecting the autonomy and dignity of Autistics requires abandoning ABA as a therapeutic modality. While this is not a new claim, the persisting prevalence of ABA as a treatment modality indicates a continuing need to make this argument. Furthermore, ABA does not occur in a vacuum, but within a pathology framework that mainstream medicine, science, and psychology seek to perpetuate. There is a fundamental incompatibility between Autistic identity and rights and the framing of Autism as a disorder advanced by the medical community and enshrined in the DSM. Autism cannot both be a natural and valuable way of being human on par with all other forms of neurocognition *and* be a developmental disorder. The belief that Autism is a disorder has led to a variety of efforts to find explanations for what is wrong with Autistic people. These explanations often involve some framing which portrays Autistics as not only defective, but sub-human. There is a whole strain of research into Autistics' "[a]bnormalities in understanding other minds", derived from Simon Baron-Cohen's (in)famous conception of Autism. Baron-Cohen, whose work many Autistic people see as having done great harm, endorses the DSM definition of Autism as a psychological disorder marked by externally observable behavioral traits, all of which

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are viewed as deficits, be they social, cognitive, or affective.[1] Autistics, on his view, struggle to understand others because they lack Theory of Mind (ToM), that is, a theory of what others think, believe, and intend, and he consistently describes the ability to develop ToM as quintessentially human. We shall show how the harm caused by this framing of Autism results in the silencing of Autistic people, rhetorical violence against us, and an assault on the very concept of Autistic identity. Baron-Cohen and most other Autism researchers are neurocognitivists rather than behaviorists, which would seem to put ABA curiously at odds with dominant scientific understandings of Autism. However, their framing of Autism as a disorder facilitates the use of ABA as a purported means to mitigate the effects of Autism and specifically its observable behavioral traits in the absence of a cure.[2] Thus, certain forms of neurocognitivism and ABA mutually reinforce each other. The Autistic researcher Damian Milton has proposed that claiming that Autistics lack ToM and therefore misunderstand non-Autistics obscures the fact that the misunderstanding is mutual. That is, it is not that Autistic people lack understanding of the minds of others, it is that Autistic people and non-Autistic people have a mutual misunderstanding (Milton 2012).

By contrast, we shall argue that conceiving Autism not as a disorder, but as a form of identity or an alternate form of life (Chapman 2019) obviates the need for ABA or, for that matter, for any treatment or cure, as those concepts are only applicable to pathologies. The "alternate form of life" hypothesis supports "neurocosmopolitanism" (Yergeau and Huebner 2017) and the principle that interactions with Autistics are better conceptualized as occurring across a cultural barrier, as if Autistic people come from another country, if not another planet. Placing understanding of Autistic behavior within such a frame shows both that Autistics operate within a different, but equally valid, set of social rules; and that non-Autistics need a better understanding of Autistic culture to reduce their tendency of inadvertently giving offense. More importantly, by granting Autistic behavior the same standing as non-Autistic behavior, we can more easily see forced adherence to non-Autistic behavioral rules and the labeling of Autism as a disorder as assertions of neuroprivilege within a human rights context.

We begin by demonstrating that ABA fails to take neurodiversity seriously and thus makes false claims to the effect that ABA "works", thus undermining its claim to be "evidence-based". The ways in which ABA measures its success and the Autistic behaviors it targets constitute a denial of Autistic identity. We then show that mainstream neuropsychology is equally problematic and serves to enable the abuses of ABA. We argue that both ABA and neurocognitivism falter because they fail to address the double empathy problem, i.e. the problem of mutual misunderstanding. This problem can be far better addressed by a biosocial or biocultural, rather than a medicalized and pathologizing, understanding of autism. Such an account is compatible with the Neurodiversity Paradigm and conceives of Autism as a cultural identity and a form of life. This avoids the assault on Autistic identity implicit in neurocognitivism and ABA. Finally, we indicate a pathway toward neurodivergence-affirming strategies for supporting Autistic people.

8.2 The Failures of ABA to Take Neurodiversity Seriously at the Clinical Level

ABA is by far the dominant therapeutic modality for people diagnosed as Autistic, particularly in the United States. It is endorsed by organizations ranging from Autism Speaks to the American Medical Association, the American Psychological Association, and the American

Academy for Pediatrics as "evidence-based" (Volkmar et al. 2014; Smith and Iadarola 2015; Hyman, Levy, and Myers 2020).[3] Despite the ever-growing scholarship and activism by Autistics, these institutions continue seemingly unreflectively to endorse a medicalized model of autism. Not surprisingly, then, ABA lies at the foundation of the work of major autism research centers that have mushroomed across the United States and elsewhere.[4] There is a considerable financial investment in autism research and intervention therapy, and possible conflicts of interest that may affect that research are not necessarily disclosed (Bottema-Beutel and Crowley 2021). The focus is on early childhood diagnosis and intervention, with scores of workshops and informational videos for training parents—most of which are aimed at "managing", modifying, and controlling their Autistic children's behavior with the purported goal of helping them to integrate better into society.

As its name suggests, ABA is rooted in behaviorism, using operant conditioning to modify behavior. Its behaviorist underpinnings, however, put it curiously at odds with the dominant theoretical conception of Autism as a neurocognitive disorder. This is partly due to the fact that many clinicians take themselves to be neutral vis-à-vis theoretical stances (a dubious position, in our view), which allows them to focus on behavioral outcomes. In addition, the neurocognitivist claim that Autistics struggle with social interactions because of an inability to empathize and a lack of Theory of Mind may lead to a focus on "managing" behavior and ignoring subjective experiences. In other words, figuring Autism as a ToM deficit may open the door to ABA as an acceptable intervention. Both the behaviorism of ABA and neurocognitivism are rooted in a neuronormative frame and thus both seek to pathologize the natural state of being Autistic; and both deny the validity of Autistic voices, subjective experience, and, ultimately, identity.

A fundamental assumption of ABA is that all of the challenges an Autistic person might have in navigating the world can be addressed solely by changing the behavior of the Autistic person. This, in alignment with the DSM, frames Neurotypical behavior and the Neurotypical world as normative and Autistic behavior as deviating from the norm. Such a framing violates a central tenet of the Neurodiversity Paradigm, namely, that all forms of neurocognition are valid. The question of whether ABA is acceptable (spoiler alert: no, it isn't) boils down to a fundamental question about whether to be Autistic is to inhabit a different, but equally valid, form of existence which should be granted human rights and freedoms; or whether to be Autistic is to be broken in a way which renders one anti-social to the point where any and all tools of the control of the state, up to and including both incarceration and execution,[5] may reasonably be used.

8.2.1 Measuring Success

ABA proponents point to a body of published research as purported evidence that ABA "works" since there are many instances where operant conditioning does modify behavior (Justin B. Leaf et al. 2022). However, they turn a blind eye to core ethical concepts underlying medical practice. None of this literature asks whether the behavioral changes resulting from ABA are in fact desirable *from the perspective of the person whose behavior is targeted*. Nor do ABA practitioners ask questions about the safety or long-term effects of the practices. The world of pharmaceuticals and medical devices employs a process called Yellow Card ("UK Yellow Card Reporting Site" n.d.) which allows anyone to report possible side-effects, flaws, etc. in any regulated medical intervention or device. First-person

experiences of ordinary people are taken seriously and investigated. There is a core belief in the ability of patients to self-report, and a value placed on subjective experiences. In contrast, ABA refuses to seriously engage with critics, dismisses reports of harm, and has no (standardized) tracking of safety. Similarly, there are long-established rigorous standards for the protocols of testing new drugs and devices. ABA is trying to leverage the reputation that these protocols have with their claim of being "evidence-based", without exercising the rigor. ABA's response to the exhortation of the Hippocratic Oath to do no harm or injustice to patients is met with silence and a stubborn refusal to acknowledge either the harm and injustice they are causing to their patients and the Autistic community.

Thus, claims about the success of ABA are tantamount to claiming to have successfully coerced an Autistic person into adopting Neurotypical behavior. From a behaviorist perspective, of course, if there is no subjective experience to be taken into account, a change in behavior just *is* a change in personality. ABA researchers claim to be using objective measurements of "progress". However, their diagnostic instruments either are known to mismeasure Autistic ability or explicitly pathologize Autistic behavior.

The measures typically used are IQ tests and the Vineland Adaptive Behavior Scales (Waters et al. 2020). IQ metrics have long been known to be problematic when working with Autistic people. Pioneering autism researcher Leo Kanner already observed clear signs of intelligence in Autistic children who were scoring very low in IQ testing. Autistics often have widely discrepant verbal and nonverbal IQ scores as well as highly uneven skills (which renders the binary of "high-" vs. "low-functioning" problematic). Because of such "spiky skills profiles", conventional IQ scoring seems almost guaranteed to give inaccurate results (Kapp 2023). These same spiky skills profiles exist widely, perhaps universally, amongst Neurodivergent communities. None of the IQ testing instruments Kapp identifies as giving more reliable results for Autistics seem to be used for measuring "progress" in EIBI [early intensive behavioral intervention] (Waters et al. 2020).

The Vineland Adaptive Behavior Scales were developed at an institution with historic connections to Eugenics ("New Jersey Eugenics", n.d.) and purport to be usable on all people. Yet they were designed with no consideration of Autistic differences and therefore apply a standard of Neurotypicality. Subjects are assessed based on rubrics including the following: "Acts appropriately when introduced to new people", "Adjusts behavior to avoid disrupting others nearby", "Pays attention to a story for at least 15 minutes", "Understands Sarcasm", "Recognizes emotions in others", "Maintains culturally appropriate eye contact", etc. By applying these measures to Autistic people, ABA practitioners are in effect measuring Autistic masking to argue that ABA does not result in Autistic people masking.

Using this instrument perpetrates rhetorical violence (Yergeau 2017, 65) against Autistics by misunderstanding, and misclassifying as "maladaptive" behaviors that are either considered completely acceptable within Autistic culture or that are reasonable responses to the environment from the Autistic person's perspective. The (optional) Maladaptive Behaviors section includes a laundry list of examples: "Is extremely anxious or nervous", "Worries for no clear reason", "Has Temper Tantrums", "Disobeys those in authority", "Is physically aggressive", "Is much more active or restless than peers", "Gets so fixated on a topic that it annoys others" (Sparrow, Cichetti, and Saunier 2016). In short, ABA explicitly identifies classic Autistic behavior as "maladaptive" and thus defines behaving less Autistic as "progress". Moreover, these measures, while claiming to be objective, require substantive evaluative judgments as to what is considered "appropriate" or what counts as "too upset",

all of which are presumably at minimum tied to the cultural background of the observer and are susceptible to bias and other subjective factors. Moreover, non-Autistic observers routinely fail to understand what counts as "reasonable worry" and, importantly, misidentify an Autistic child acting in self-defense as aggression and mislabel Autistic meltdowns as "temper tantrums". This frame makes the behavior a fault in the child, not a problem with the environment.

The ideas that only "objective" measures of behavior are significant and that the only meaningful change is behavioral change are deeply flawed. Using purely external measurement and thus dismissing the subjective experience of the Autistic person being subjected to ABA, in itself constitutes violence against the Neurodiversity Paradigm. To that extent, ABA is itself a denial of Neurodiversity.

The oft-touted selling point of ABA as an "evidence-based" practice actually reflects that ABA only values the judgment of external non-Autistic observers, denies the relevance of Autistic subjective experience, and thus is, at its core, a rejection of the Neurodiversity Paradigm and the concept of Autistic Identity. Because every Autistic person has a unique lived experience, any claim that an external "objective" measure of behavior can be indicative of what that change means to a specific patient is prima facie absurd. The entire raison d'être of ABA—changing Autistic behavior—relies on the denial of Autistic Identity. When ABA proponents stake out what they assume to be the moral high ground of being "evidence-based" they are in fact admitting to the violence their interventions commit against Autistic identity.

8.2.2 Targeted Behaviors

a **Eye contact.** Several specific aspects of Autistic behavior and cognition illustrate the inappropriateness of ABA. The first of these is eye contact. Organizations such as Autism Speaks describe ways in which eye contact is socially important ("Autism and Eye Contact", n.d.). These assertions, often used as justification for using ABA to modify Autistic behavior, miss the point that eye contact is a cultural matter, not an essential aspect of being human. In Japanese culture, for example, "people are taught not to maintain eye contact with others because too much eye contact is often considered disrespectful" (Uono and Hietanen 2015). Insisting that Japanese students both meet and tolerate Western standards for eye contact would be inappropriate; the same cultural sensitivity should be applied to interactions with Autistic people. Because eye contact is assumed to be crucial for appropriate social interactions, increased eye contact by Autistic people is assumed to be an "improvement" in their social skills. This assumption precludes finding out why Autistic people don't make eye contact.

So why don't they? In addition to a wealth of anecdotal reports from Autistic people (I, Dani, can personally tell you that I generally find making eye contact creepy, weird, unsettling, etc., and when people are insistent about making prolonged eye contact it feels intrusive to me), there is also some evidence suggesting that the reason is increased stimulation within the amygdala (Hadjikhani et al. 2017). Simply put, to many Autistic people, eye contact triggers deeply rooted fear responses. In general, Autistics feel that the perceived issues with eye contact are far better fixed by non-Autistics accepting Autistic avoidance of eye contact as a respected cultural difference (Vance 2019).

By intentionally forcing actions which are known to create psychic pain and harm, ABA is arguably tantamount to torture. If those advocating psychological torture

techniques were to argue in court that the pain claimed by their victims wasn't real, presumably this would not be considered exculpatory. Yergeau finds it "telling that shrinks and scholars concern themselves so frequently with autistics and eye contact, and yet they refuse to consider the violences of their own (sometimes metaphorical, sometimes literal) gazes" (Yergeau 2017, 155). This kind of methodological blind spot can affect philosophy as well. Catala argues that "when philosophers construe epistemic agency as requiring that one look their interlocutors in the eyes or not appear nervous or anxious in an epistemic exchange, they commit metaepistemic injustice with respect to Autistics, who typically utterly dislike and, hence, avoid eye contact and who often experience social anxiety" (Catala 2024).

b **Stimming.** This is one of the most visible, and often cited as one of the more problematic, Autistic behaviors. Somewhat perversely, ABA practitioners both encourage parents to "tolerate" stimming when that stimming is being used for emotional self-regulation, but advocate changing or eliminating stims if they interfere with school or social interactions:

> We can work to help the individual learn under which situations is it okay to stim in, and which situations it is not okay to stim in. For example, I should not stim in the middle of math class, but if I need to stim, I can ask for a break in the sensory room.
> ("How To Manage Stimming | ABA Psychological Services, P.C.," n.d.)

In short, ABA distinguishes between "good" or "appropriate" stimming and "bad" or "obtrusive or disruptive" stimming. This distinction, however, fails to adequately account for the reality that one might stim in school or social interactions precisely because those scenarios are stressful and thus increase the need for self-regulation. Thus the idea of trying to define proscribed times when it is not okay to stim is problematic. If a student finds math class stressful, and thus is more likely to stim in math class, how appropriate is the suggestion that the student either leave their distress unregulated, thus presumably decreasing their ability to learn, or wholly deny themselves educational opportunity by leaving the room? From a behaviorist viewpoint this may seem obvious and sensible. From an understanding of stimming as managing anxiety sufficiently to learn, the proposed "solution" is a violation of the United Nations Convention on the Rights of Peoples with Disabilities insofar as access to education comes at the price of invalidating one's identity.

We suspect that the so-called interference caused by stimming is that non-Autistic students and staff are distracted by the motion of stimming, in which case ABA is clearly placing the needs and preferences of non-Autistics over the emotional regulation and educational needs of Autistic students. This perceived "distraction" should be seen as an occasion to reflect on making the context more hospitable, inclusive, and conducive to learning for everyone rather than forcing Autistics alone to modify their behavior. Doing so, of course, is not without its challenges (Cook 2024).

A further complicating factor is affective empathy. Many Autistics can experience this as literally feeling another person's emotions. For example, when I, Dani, am in the same room as a person or persons who are highly stressed, I will myself become stressed.[6] For many Autistics,[7] the response to this absorbed strong feeling is to stim. If others in a class are stressed, that can in and of itself induce an Autistic person to stim. The real problem is the intersection of the stress of the non-Autistic children with the presence of the Autistic child. It seems not unreasonable to posit that perceiving the stimming of the

Autistic child as a distraction is heightened by the fact that the perceivers are in a state of heightened stress. Rather than seeking to address the stimming, a mere symptom, perhaps schools should be asking themselves hard questions about why their math classes induce such high levels of stress.

A neuronormative behaviorist perspective armed with tools for changing people's behavior cannot grasp the reality of what stimming is. From an Autistic viewpoint the need to stim is an indication that institutions need to change by either eliminating stressors or modifying behavioral standards to allow Autistic students to fully engage with the learning process. After all, isn't the goal of a school to maximize learning, and not to reinforce outdated and harmful social rules which run afoul of international human rights law? (See Acevedo and Nusbaum 2020.)

c **Masking.** This term is used to describe Autistic people trying to pretend that they aren't Autistic (Stanborough 2021; "What Is Autism Masking"? 2024). Somewhat ironically, many ABA centers have information on their websites explaining masking and the risks it creates for Autistic people. These risks range from exhaustion to autistic burnout to suicidality. And yet these centers emphasize things such as teaching "socially significant behavior". If one accepts the Neurodiversity Paradigm, then one understands that Autistic behavior already is "socially significant". ABA, by focusing only on changing the way that Autistics behave, can only be understood as teaching Autistic children how to mask.

The academic response to this critique is telling:

> There are some who have invoked the concept of masking…, …claiming that all individuals diagnosed with ASD learn to mask their behavior to conform to societal norms but remain essentially autistic. However, given measures of the outcomes of EIBI are standardized and objective, it is difficult to support the claim of masking.
>
> (Justin B. Leaf et al. 2022)

This implicitly affirms the centrality of behaviorism to ABA: As we have already seen, if the only objective measure of change is behavior, then personality is just behavior; therefore, removing "Autistic behavior" makes a person less Autistic; QED. There is no room for the very idea of masking. Yet the idea of someone becoming less Autistic runs counter to both the Neurodiversity Paradigm and the medicalized view of Autism as a lifelong condition (which further brings into question the AMA's continued support for ABA).

One underlying assumption in all of ABA, as well as this particular rejection of the charge of teaching masking, is that the subjective experience of Autistics is irrelevant or, as Yergeau puts it, that they lack rhetoricity, i.e. the ability to speak or otherwise express themselves (Yergeau 2017). In rejecting claims that ABA is training Autistics to mask, one ought surely be informed by the many first-person accounts from Autistics who have either been subjected to ABA, or have grown up in a society whose rhetorical understanding of Autism is deeply influenced by ABA. Leaf et al.'s complete failure to engage with these accounts can only be understood as indicating that Autistic voices are irrelevant or meaningless and thus need not be acknowledged. Given that the context of the claim that ABA doesn't teach masking is an article ostensibly engaging with critiques of ABA, including challenges that ABA is harmful, this seems curiously evasive.

Another assumption is that the changes observed, such as a reduction in stimming, are necessarily positive ones. However, in order to judge a behavioral change to be positive

from the child's perspective, an observer would need to be able to measure the difference between that child stimming less because they no longer have a need to stim and stimming less because they are masking. This would require an objective measure for assessing intent or reasons for a behavior, which would break with ABA's behaviorist underpinnings. From a behaviorist perspective, there is presumably no difference between the two reasons why a child might be stimming less. All that matters, once again, is the behavioral change. Yet in the absence of such an instrument, all of ABA's "evidence" is meaningless.

Autistic advocates and researchers have connected ABA to both PTSD and suicidality (Kupferstein 2018).[8] While Leaf et. al. give the appearance of addressing these issues, their dismissals demonstrate a lack of serious engagement with allegations of substantial harm. In brushing aside Kupferstein's claims regarding PTSD, they cite (Justin B. Leaf et al. 2018) which tells us that "Perhaps the most concerning possibility resulting from Kupferstein (2018) is the potential for families to avoid seeking out and receiving what has been documented as the largest category of established interventions for individuals diagnosed with ASD". In other words, we should ignore the work of Autistic researchers and any possible connection between ABA and PTSD because it might discourage parents from seeking out ABA. Their attack on Kupferstein's "methodological and conceptual flaws" is particularly hard to take seriously given the depth and totality of ABA's methodological and conceptual flaws which we have already demonstrated. Similarly, Leaf et al.'s only mention of suicide is within a claim that ABA teaches social skills and communication and thus must be increasing happiness and reducing suicide. This again side-steps the question of masking, which is clearly a causal factor in harming Autistic people's mental health (Miller, Rees, and Pearson 2021) and should be considered a possible causal factor in increasing the risk of suicide (Cassidy et al. 2020). It is precisely this blindness to psychic harm, which makes ABA so dangerous to the Neurodiversity Paradigm and to Autistic people and identity.

The absence of questions about the Autistic viewpoint is not a bug in ABA, it is a feature. The astounding starting assumption of Ivar Lovaas, the first psychologist to inflict ABA on Autistic children, which still permeates mainstream understanding of Autism today, is that Autistic people are not actually people (Chance 1974). ABA, also used as a conversion therapy to "cure" homosexuality, was, early in its development, "represented by psychoanalysts and other academics as an evil, a behaviorist methodology that supposedly transformed humans into little more than dogs, machines, or automatons" (Yergeau 2017, 74). It is thus a manifestation of the Skinnerian belief that human beings lack free will (Skinner 1980). For Skinner, mental states are at best epiphenomenal and at worst fictions; they play no role in a scientific explanation of a person's behavior. Rather, that behavior is explained as a response to stimuli in their environment, based on the person's genetic and environmental history. Thus, people's behavior can be controlled by controlling the environment. It is therefore no surprise that ABA pays no heed whatsoever to the internal states of Autistics. As Yergeau puts it, "Whereas ToM stories autism in terms of internal states and cognitive processes, behavior analysis stories the autistic through observation, bodily comportment, and external behavior. Taken together, ToM and ABA construe the autistic as involuntarily willed and involuntarily drafted-beholden not only to neuronal desires but to the desires of therapists and caregivers and social norms" (Yergeau 2017, 14–5).

Given the harmfulness of ABA to Autistic People and ABA researchers' failure to meaningfully engage with critiques, continued prevalence and use seems best explained not by

empirical evidence of its success, but by its sheer profitability, not just for ABA practitioners but for organizations purporting to be acting on the behalf of Autistic people. The examples of eye contact, stimming, and masking all demonstrate that neurotypical researchers, parents, teachers, and others routinely fail to adequately understand Autistics' behavior because they fail to understand what they are experiencing and what motivates their actions. This lack of understanding radically undermines claims that ABA is evidence-based and should be the ground for abandoning ABA as a treatment modality for Autistics.

8.3 Failures to Take Neurodiversity Seriously at the Theoretical Level

ABA is presented and marketed as a tool for clinical psychologists and to that extent need not endorse any particular theoretical conception of Autism. ABA may be agnostic with regard to theories of Autism, but ABA does not occur in a vacuum. Presumably part of the force of claiming to be evidence-based would be that ABA at least is consistent with scientific understandings of Autism. Yet ABA's behaviorism would seem not to be consistent with neurocognitivism.[9] By the same token, mainstream neuropsychological theories of Autism are at odds with the Neurodiversity Paradigm as they, too, deny the legitimacy of Autistic difference. While perhaps the best-known neurocognitivist Simon Baron-Cohen is not a behaviorist, his dominant and deeply neuronormative conception of Autism is damaging to Autistics because it misunderstands Autistic experience and thought. It is also too narrow a view of neurotypical thought.

Because this neuronormative conception of Autism allows for an endorsement of ABA by organizations such as the AMA and the two APAs (Psychiatric and Psychological), it is clear that not just ABA is problematic from a human rights perspective, but so too are mainstream medicine, science, psychology, and psychiatry. The underlying presumption of the DSM-based pathology model is that Autistics are a defective version of neurotypicals, and that understanding, from a neuronormative—styled as "normal"—perspective of this difference is critical in understanding the needs and therapy pathways for Autistics. Yet the Neurodiversity Paradigm completely rejects this presumption and holds that the understanding of Autistics from a third-person neuronormative viewpoint must be seen as inferior to the first-person self-knowledge of Autistics. In exactly the same way that neuronormatives hold the Autistic conceptions of neuronormativity as both flawed and irrelevant. In other words, once again, if it is true that Autistics fail to understand the non-Autistic world, the same is true for non-Autistics' understanding of the Autistic world.

This leaves neuropsychologists with two options: adopt a new approach which places Autistic voices and the Autistic Community at the center of expertise about Autism, or openly reject the claim that Autistic people have human rights.

Part of the harm caused by the pathology model of Autism is that it places the differences of Autistics into the realm of "deficits" and relegates any positive traits associated with autism into a realm of clinically irrelevant curiosities. Thus the standard diagnostic processes sanctioned in America detail all of the "deficits" that a specific person has such as deviating from Neurotypical developmental benchmarks, but remains silent about even the possibility for advantages such as outperforming those benchmarks. For example, the child whose vocabulary development lags behind their peers is pathologized; the child who is granted special dispensation to access the portions of the school library set aside for students four to six years older is invisible.

One of the ways in which Autism is constructed as a set of deficits is to focus on a critical difference in communication: how Autistics and non-Autistics process context. For example, let us imagine a fictional scenario. Picture an Autistic visitor to New York City approaching someone in the main hall of Grand Central Station and asking how to purchase a train ticket. They might get a response such as "well, you go to that ticket window over there and tell the person where you want to go" accompanied by pointing to the middle of the row of ticket windows. A typical non-Autistic visitor would likely interpret this response as meaning that they can go to any one of the seemingly (and actually) identical ticket windows and purchase their ticket there. An Autistic person might seek to determine which specific window was being indicated, let's say window eight, and would dutifully go and stand in line at window eight. If window eight proves to be closed, the Autistic person might have a meltdown, rather than simply moving on to a different window, because the instructions they were given seemed, to them, very clear that this was the only window at which they could buy their ticket.

The non-Autistic person is aware that the ticket windows are probably identical, and connects this with the instructions to arrive at the inference that they were being told to go to any ticket window. The Autistic person, however, even if they are aware that the windows seem to be identical, will find heightened significance in the use of the words "that ticket window" and will seek to go to the specific window indicated.

This difference would be represented by neurocognitivists as a deficit in the Autistic's internal processing, and likely labeled a lack of "central coherence". This is a term used to indicate that

> autistic brains process meaning with less sensitivity to the relevant context than neurologically typical brains. This leads to a focus on details at the expense of wholes, such that autistic individuals tend to miss the gist of certain meanings, and to a fragmented sensory-perceptual world.
>
> (Chapman 2019)

In other words, the Autistic misunderstands what is meant by "that window" because they fail to integrate that phrase appropriately into the context of the utterance. Yet, as an Autistic, I, Dani, would argue that the deficit here is an inability on the part of many non-Autistics to give good directions (arguably, Barbara adds, because they are insufficiently detail-oriented). I would suggest that the reader consider the number of times they have tried to follow someone's directions to that person's house and gotten lost. When they have sorted through the muddle, it usually turns out that the person giving directions has forgotten a step. Or, forgotten some important piece of information about a step. Or, their description was simply unclear. Non-Autistic people generally laugh off these mistakes. They tolerate the vagueness and inaccuracy. (One might hold that precision and punctiliousness should be equally tolerated!) And no one seems to think there is anything unusual or bothersome about having been sent off on a wild goose chase. In many instances, the host will laugh off the error and say something implying that the error isn't really significant. I, on the other hand, cannot recall a single instance where someone I have given directions to has failed to arrive at the desired location.

So the whole concept of "central coherence" when viewed from an Autistic perspective is simply an inability of non-Autistic people to see their own inaccuracies as flaws, and a

refusal to see an extreme level of attention to detail as a useful benefit. This issue of central coherence is actually a symptom of a deeper and more persistent problem: what Autistics do is only given the meaning that neurocognitivists choose to give it because they don't make the effort to understand adequately. Instead, they assume that non-Autistic people have a perfect Theory of Mind for Autistics. The assumption of lack of central coherence is that the Autistic person is incapable of connecting the uniformity of the windows with the idea that any window will serve my purpose. The flaw is thus seen in their failure to interpret "that window" in the generic way that a non-Autistic would, rather than seeing that there isn't really a flaw but merely confusion as a result of the non-Autistic's imprecise wording; an Autistic person would have said that one could use any of the windows, and so the Autistic person asking for directions assumes that being given specific instruction has meaning.

The broader implication of this disconnect is that the entirety of Baron-Cohen's Theory of Mind oeuvre itself suffers from a lack of central coherence. Because neurocognitivists assume that neuronormative communication is "correct", they assume that anything that goes wrong is due to a deficit in Autistic thought. To non-Autistics, failing to incorporate the uniformity of the windows is plausible, but the instructions being over-specified is not. While this particular example is invented as a thought experiment, none of the ToM literature ever considers that interacting with Autistic children in exactly the same way as non-Autistic children is not a good experimental protocol, but actually a fatal flaw. And this failure renders that literature, and the DSM construction built on it, fatally flawed. The entire empirical basis for the claim that Autistics have a deficit in social communication, which is one of the most commonly cited characteristics of Autism as a disorder, is not worth the pixels on which it is printed. Once one realizes that non-Autistic people don't actually understand what Autistic behavior means, all of their research results simply fall apart. The implications of this failure of neurocognitivism are pervasive and have to do with the so-called problem of Double Empathy, which we discuss below. What is learned from the way neurocognitivists have shaped the conversation around Autism is reliant on the assumptions that non-Autistic people have perfect understanding of Autistic people; and that anything an Autistic person might say which contradicts the interpretation of the non-Autistics is false, that Autistics not only fail to understand non-Autistics, but also fail to understand or be able to explain themselves to others. The accounts of Autistics suffering the consequences of having been completely misunderstood by non-Autistics who had power over them (teachers, managers, HR departments, etc.) are legion. Yet these assumptions, so deeply buried that it is plausible non-Autistic researchers studying Autism—that is, trying to understand Autism better—are not even aware of their centrality to neurocognitivist thinking, are farcically wrong. Farce, not comedy, because the real-world harm these assumptions cause to Autistic people on a daily basis is immeasurably damaging. One might say that, paradoxically, they are trying to understand Autism, but *not* Autistic people.

This analysis, together with what we have already said about the importance of taking Autistic perspectives into account, gives us the beginnings of a framework for defining what an Autistic reading[10] of a text might be. It should be emphasized that being Autistic is neither a necessary nor a sufficient qualification for performing an Autistic reading. Central to an Autistic reading is an understanding of Autism as a valid way of being. The purpose of an Autistic reading is to turn the window of observation through which neurocognitivists and behaviorists have traditionally viewed Autistic people into a mirror in which non-Autistic people can acquire some insight into how they appear from an Autistic perspective. Being Autistic is not

sufficient to enable one to provide an Autistic reading because many Autistic people have internalized the ableism of ABA and the DSM, and this has alienated them from their ability to recognize the validity of their own self. Because this internalized ableism causes Autistics to see themselves through the lens of deficit, they cannot experience a truly Autistic viewpoint. Similarly, because the validity of an Autistic reading is rooted in a sound account of Autistic experience, it is possible for non-Autistics, through second-person interaction with Autistics, to gain sufficient insight into that experience to be able to understand Autistic viewpoints.

While an Autistic reading can be provided both from a first-person Autistic perspective in the form of Autistic self-advocacy and from a non-Autistic perspective, in the form of allyship, it is also liable to be strengthened by dialogue between the two perspectives. The reason for this is that the symbiosis of a skilled "translator" is known to improve Autistic inclusion in many settings by, in part, making Autistic communication more accessible to non-Autistics (and vice-versa). The I-you interchange in such a dialogue will likely fine-tune or develop a new "language of perspicuous contrasts" (Taylor 1985). Such a language would increase mutual understanding between Autistics and non-Autistics by articulating the differences—as well as the similarities—between Autistic and non-Autistic perspectives without being reducible to either of them.

The key metric for the reliability of an Autistic reading is the extent to which that reading reads true to Autistic people.[11] For example, an Autistic reading of Baron-Cohen's survey of fifteen years of Theory of Mind research (Baron-Cohen 2000) leaves one marveling not just at how someone lauded as a global expert on Autism seems to have literally zero understanding of what it is like to be Autistic; but also at how someone can repeatedly publish papers so deeply dependent on a transparently false assumption and still remain a respected academic. One (at least partial) explanation of this would be a failure to take a second-person stance toward Autistic subjects. Going even deeper, it is hard to see how mainstream medicine and psychology, both of which talk at great length about how their framing of Autism is rooted in science, fail to see the fact, transparently clear from our Autistic viewpoint, that the evidence they cite is derived from experiments that are asking the wrong questions, and asking them in a way which makes it impossible to have gotten anywhere near the correct answer. So it is not just ABA that relies on an erroneous claim to being evidence-based; it is the entire scientific history of Autism research undertaken in a way that precludes an Autistic reading of its observations and data. And when large institutional forces that are deeply invested in ABA and the DSM continue to reassert their transparently wrong view of Autism, this is received by Autistics as either brainwashing (thus the internalized ableism) or gaslighting. Fortunately, there are signs of hope and change. When Autistic voices are centered, better understanding and approaches are already proving possible. The faster we abandon the errors of the past, and stop repeating those same errors today, the better.

8.4 Double Empathy

Neglecting Autistic people's perspectives—both at the clinical and the theoretical level—is an effect of the so-called Double Empathy Problem: just as Autistics are "blind" to the minds of Neurotypicals around them, so, too, are Neurotypicals blind to the minds of Autistics (McGeer 2009, 524; Chapman 2019). Double Empathy thus challenges the idea that "neurotypicals are simply able to cognise empathy, while autistics are not; rather members of each group struggle to cognise the minds of the other group" (Chapman 2019). Indeed,

Yergeau and Huebner argue that at the same time as researchers (such as Simon Baron-Cohen) insist that Autistic people lack social cognitive skills and especially the ability to empathize, they themselves exhibit an abject failure to empathize with Autistics or to understand their behavior (Yergeau and Huebner 2017).

The fact that "autistic people become better at understanding neurotypicals more often than the other way around" (Chapman 2019, 427), suggests that this blindness is not the result of an *inability* to see or understand, but rather an *unwillingness* on the part of Neurotypicals to do so. It is not unlike Charles Mills' concept of White ignorance (Mills 1997), which refers to the willful, if sometimes unconscious, resistance of whites to acquire knowledge about the history of racism and about the history and lives of Black and brown people. Amandine Catala refers to this kind of phenomenon as exhibiting both "subjective avoidance" and "objective avoidance": Subjective avoidance refers to a lack of self-transparency of the knower. In particular, it refers to the kind of lack of awareness we discussed above where the subject or knower is not aware of their epistemic limitations (or of biases that affect their ability to understand). This in turn leads to an inadequate understanding and misinterpretation of the social (or objective) world (Catala 2024, 256). On Catala's account, objective avoidance constitutes a form of epistemic injustice (Fricker 2007; Medina 2013) inasmuch as it attributes to Autistics an undue credibility deficit (testimonial injustice) as well as an undue intelligibility deficit (hermeneutic injustice). That is, due to factors such as lack of eye contact and anxiety, Autistics are not recognized by non-Autistics as competent knowers and what they say is misunderstood. This then leads to metaepistemic injustice because it is used to justify dismissing Autistics' first-person testimonies and marginalizing their knowledge production (Catala 2024, 250) in the ways we have already indicated. ABA faces an exacerbated form of this problem because it completely ignores Autistic voices.

Because ABA is based on behaviorism, a psychological theory that denies an explanatory or causal role to mental states, it can make neither theoretical nor practical sense of Double Empathy. This does significant harm. ABA casts the behavior of Autistics as problematic, as behavior that must be changed, yet absolves non-Autistics from making any effort to understand the ways in which non-Autistic behaviors are problematic for Autistics and ought to be changed. This allows ABA practitioners to interpret Autistics' failure to change their behavior as willful resistance rather than as a rational and legitimate defense against an assault on one's person and, ultimately, one's identity. If, for example, an Autistic child strikes or pushes a neurotypical child at school, an ABA approach sees the physicality of the Autistic child as unacceptable aggression, yet deems any triggering behavior of the neurotypical child as "normal" and above reproach. After all, the triggering actions did not involve "touch". However, once again, this reveals the neuroprivilege of ABA practitioners inasmuch as it constitutes a failure to try to understand and fully appreciate the situation of the Autistic child who is experiencing yelling, for instance, as akin to physical assault. Perversely, this results in excluding children from educational opportunities for acting in self-defense. It also demonstrates the collision of behaviorism with Double Empathy: the behavior of the Autistic child is wrong because there is only one standard: the neurotypical standard. There is no space in behaviorism for the psychic assault experienced by the Autistic child. That said, the failure to change behavior may well *be* a form of resistance or "counter conduct" in response to unjust treatment (Yergeau 2017; Acevedo and Nusbaum 2020). Yet there is no room in ABA for recognizing such resistance for what it is, inasmuch as ABA "overwrites its subjects' rhetoricity [i.e. their ability and manner of expressing

themselves] with compliance" (Yergeau 2017, 100). ABA is so focused on making Autistic children behave in neurotypical norm-conforming ways that it has been characterized as "an apparatus of biocontrol actionable through a set of calculated, productive, yet restrictive corporeal constraints that break down and rearrange the autistic body in order to render it functionally docile" (Acevedo and Nussbaum 2020).

ABA is neuronormative not only by seeking to eradicate behavior that neurotypical observers consider aberrant and uncomfortable to observe; it reduces the semiosis, i.e. the process of meaning-making, of Autistic movement to non-meaning. In other words, it evacuates the ways in which Autistics communicate and move—which can be and often are creative ways of making sense of the world—of meaningfulness. According to Ralph Savarese, "experts", rather than trying to understand whether or how Autistic movement might have meaning for Autistics, "interpret atypical comportment as the outward sign of inward dysfunction" (Savarese 2013, cited in Yergeau 2017, 148). By viewing Autistic stimming, for instance, purely either as meaningless or as emotional regulation, ABA practitioners eliminate the possibility of stimming being part of embodied learning or creative processes. Again, given their behaviorist orientation, this is not surprising. Yet if Autism is not a disorder, then Autistics' behavior should be presumed to be meaningful and thus subject to interpretation. That is, if one cannot make sense of the behavior, the response should be, "let's try to understand what the behavior signifies", not "the behavior is unintelligible and hence should be eliminated". As I, Dani, am writing this, I am thinking about the extent to which I use physicality when I am doing certain types of thinking. Feeling the way that my body might move through imagined N-dimensional space representing abstract ideas or complex systems can help me more completely understand the richness I am contemplating. I feel like this is perhaps a form of synaesthesia: the dancing of a mathematical proof, the hand gestures of conducting the symphony of a complex system. As Yergeau argues: "If autism is a rhetoric unto itself, then …we must confront the idea that being autistic confers ways of being, thinking, moving, and making meaning that are not in and of themselves lesser-and may at times be advantageous" (Yergeau and Huebner 2017, 152). Moreover, such ways of thinking and Autistics' descriptions thereof are exhilarating and broaden all of our conceptions of what kind of human thinking is possible.

8.5 Conceiving Autism as an Identity and Culture

8.5.1 Autistic Forms of Communication: Not Speaking Is Not Communicating

There is now a wealth of Autistic literature ranging from autobiographical writing, countless blogs (including "ZenMasterBear", n.d.), online fora, to scholarly anthologies and journals such as *Ought: The Journal of Autistic Culture*. Much of this writing is testimony to and an explication of Autistic forms of communication, thinking, and interacting with the world that "are rich and varied forms of communication in their own right, not inadequate substitutes for the more standard forms of communication" (Baggs, cited in Chapman 2019, 429).

In *Authoring Autism*, Yergeau describes the many ways in which non-Autistic views of Autism can deny the rhetoricity of Autistic people. Depending on the situation, clinicians may argue that Autistic people are either *not* Autistic *enough* or *too* Autistic to make claims about Autism. In this Catch-22, Autistics are silenced as "inherently unreliable, inherently and rhetorically halved" (Yergeau 2017, 43). ABA is a chief culprit in this process inasmuch

as it seeks to eradicate "[e]mbodied communicative forms—including the echo, the tic, the stim, the rocking body, the twirl—[which] represent linguistic and cultural motions that pose possibility for autistics" (Yergeau 2017, 135). Yergeau instead envisions a joyful reimagining of Autistic behavior and communication: "For my part, I want a rhetoric that tics, a rhetoric that stims, a rhetoric that faux pas, a rhetoric that averts eye contact, a rhetoric that lobs theories about ToM against the wall" (Yergeau 2017, 29).

Yet in response to critiques by Autistic advocates, researchers, doctors, and parents frequently ask "But what about the 'severely' Autistic[12] kids"? The implication is that since not all Autistics can articulate their needs and desires clearly, their care surely should be left to "professionals". This almost always includes an invocation of the bogeyman of the "nonverbal Autistic". We say bogeyman as there is now a whole community of non-speaking Autistic adults who are telling their own stories and clarifying that their chief challenges flow not from an inability to communicate, but from the refusal of medical professionals and parents to accept their mode of communication as valid. As their challenges are with vocalization not with the use of language, they are able to clarify in writing how far from accurate the portrayals of their communication differences are. Examples include the writing of the aforementioned Mel Baggs, as well as Nick Pentzell's contribution to the *Philosophy of Autism* volume (Pentzell 2013). Since ABA and neurocognitivists like Baron-Cohen deny the relevance of the lived experience of speaking Autistics, it is depressingly unsurprising that they seem to have made no alteration at all in their work to incorporate the fact that they have completely misunderstood nonspeaking Autistics. They haven't even changed their lexicon to remove the term "non-verbal".

The result is the perpetuation of a system which silences Autistic voices in the conversation about what is best for Autistic children. When one contrasts the clamoring for ABA by non-Autistic parents of Autistic kids with the advice of Autistic people against forcefully changing their behavior (Sinclair 1993), the harm done by over-reliance on non-Autistic expertise becomes vividly clear. Because the core of the critique of ABA is that it denies the lived experiences of Autistics, any researchers who encourage the idea that Autistic voice is irrelevant, or that Autistics are less than human because they lack the ability to speak or some other ability that is thought to be essential to being human, are enablers of the violation of Autistic identity represented by ABA.

8.5.2 Autism as Form of Life

According to Chapman, "once we take the double empathy problem into account, it seems the problems in autistic attunement and empathising are not a matter of an inherent deficit found simply in the autistic population but are more a matter of mismatch between the individual and the community" (428). In other words, what the deficits—be it in ToM or empathy or communication or relational ability—that the medical establishment, researchers, and others attribute to Autistics are *context-dependent*: they may appear as deficits from the perspective of one particular community—but *not* from the perspective of another. But if that is the case, they are not *inherent* deficits. Indeed, Chapman writes that "autistic individuals often do seem to be able to intersubjectively attune to other autistic individuals" and that

> in autistic space, autistic people often do seem to be attuned to those around them and experience the various benefits that come with this; while conversely, neurotypicals

> seemingly experience all the characteristic problems and anxieties associated with a lack of empathy or intersubjective attunement—problems typically thought of as essentially autistic.
>
> (Chapman 2019, 428)

The awkwardness and challenges of being in a different culture disappear for Autistics, but emerge for non-Autistics. From a neurotypical perspective, one need only think about how awkward, exhausting, and challenging it can be to be in a new cultural setting in order to get a sense of what life in a Neurotypical world is like for Autistics. The situation of Autistics seems to be not unlike that described by María Lugones who reports having different personalities in different cultural contexts—playful or serious—precisely because of the difference in her sense of ease in a given cultural setting (Lugones 1987).

Building on McGeer's work, Chapman therefore proposes conceiving of Autism as a—still emerging—*form of life* in the Wittgensteinian sense rather than as a socio-cognitive deficit (Chapman 2019, 429).

Thinking of Autism in terms of cultural difference or difference in form of life makes it possible to reframe what are often viewed as problematic Autistic behaviors as rational responses. Thus Chapman uses Wittgenstein to account for the autistic tendency toward "highly mechanistic, systematic thinking". Wittgenstein argues that the kind of confidence that underpins our ability to move easily through our world (our "pre-epistemic trust", as Chapman puts it) is a set of things that stand fast—things that we fundamentally take for granted and tacitly presuppose and that form a system of *shared* beliefs and practices—in short: a culture. But these things are all learned over time; that is, it is a process of acculturation. Chapman argues that someone who develops in an alien form of life and thus is "only half attuned to the dominant system of belief", should be expected to lack "intuitive knowledge and pre-epistemic trust" and to routinely face "confusion, skepticism, and pre-epistemic anxiety" (431). As a result, "the apparently increased autistic drive to find patterns, generalities, and essences is also often a response to the anxieties that arise from this uncertainty" (432–33) and should be understood as more social than biological. We agree with Chapman that this is not a form of mechanistic or automated thinking, but a human response to uncertainties and anxieties experienced when immersed in an alien form of life.

8.6 Taking Neurodiversity Seriously at the Theoretical and Clinical Levels: A Biosocial Account

A neurocognitivist account of Autism that endorses ABA as a therapeutic modality might view the goal of ABA to be the rewiring of Autistic brains. In their inimitable fashion, Yergeau writes:

> [P]resupposing ABA could rewire autistic brains, should we? (Rhetorical question. The answer is *fuck no*.) Applied behavior analysis is host to a number of ethical questions that, quite unfortunately and often to traumatic effect, are passed off not as questions in need of philosophical reflection and debate but instead as matters of common sense: the default assumption is that it is better to be non autistic than it is to be autistic, always.
>
> (133)

We emphatically agree that Autistic brains require no rewiring in this sense and that ABA practitioners must reconsider the moral implications of their approach. Once we conceive of Autism as a form of life rather than as a disorder of deficits, the need for ABA evaporates. Rather than thinking of Autism in either behaviorist or neurocognitivist terms, we propose thinking of it in terms of a biosocial model of cognition and brain plasticity (Pitts-Taylor 2016). On such a model, Autistic ways of being may be biologically based, but are always culturally inflected in terms of how they are read; that is, there is no culturally neutral "thing" that is Autism. Thinking of Autism as a form of life rather than as a culture is more congenial to a conception of Autism that is not purely social.

By the same token, on a biosocial account, all our brains are constantly being rewired by our experiences. This makes the question of which features of our brain-body are the result of genetics and which are the result of our environment and experience difficult if not impossible to (fully) sort out.[13] In the case of Autism, it means that we must ask the ethical and philosophical questions that can help us differentiate the kind of rewiring (by the environment, by social interactions, by one's engagements with the world in general) that produces masking from the kind of rewiring that fosters Autistic creativity and autonomy.

8.6.1 Theories of Whose Mind?

Contrary to the neurocognitivist claim that Autistics lack Theory of Mind, we believe that they are in fact working much harder than neurotypicals to come up with Theories of Mind that might explain others' behavior that they find baffling. This becomes even more plausible once we jettison the idea that understanding others should be conceptualized in terms of ToM. Abandoning this idea is, furthermore, more consistent with the cultural, Wittgensteinian conception of Autistic identity as a form of life. Put another way, ToM is only needed when the cultural attunement to a form of life and pre-epistemic trust are missing. That is, we—Autistics and non-Autistics alike—need to resort to coming up with a theory to *explain* others' behavior from a third-person perspective in order to be able to understand it only when we cannot rely on a shared background understanding. Ironically, non-Autistics, including and especially researchers, have generally failed to develop an adequate ToM *for Autistics*. That is, it is *they* and not Autistics who have lacked the right ToM.

ToM is an overly intellectualized model for understanding others in terms of metacognitive theorizing—even if ToM is claimed to be an implicit, not an explicit theory. It conceives understanding others from a third-person, observer perspective as aiming to explain and predict their behavior. By contrast, most of our interactions with others occur from a second-person perspective: we are *interacting* with them dynamically and engaging in joint activity together. The foundation for such interactions is laid much earlier than the purported onset of ToM in embodied forms of so-called primary intersubjectivity (Gallagher and Hutto 2008). On this view, another's intentions are not hidden deep inside their mind-brain, but are manifest in their bodily comportment. This kind of embodied account of intersubjectivity is endorsed by Shaun Gallagher, who argues that Autism cannot be explained in terms of a ToM deficit precisely because ToM is not a good explanation of Neurotypical intersubjective experience (Gallagher 2004, 202).

Unfortunately, Gallagher then explains Autism in terms of a deficit in the capacity for basic intersubjective interaction, describing various Autistic traits as "symptoms" resulting from "abnormal" development (209–10). In other words, he, too, is guilty of

conceptualizing Autism as a disorder. Nonetheless, his account has three promising aspects: i) Gallagher believes Autism to be a matter of social challenges as well as underlying neurological differences, which points in the direction of a biosocial account. ii) Rejecting ToM in favor of an embodied conception of intersubjective understanding opens up new possible directions of research that would take account of Autistic embodiment. iii) The emphasis on intersubjectivity paves the way to address the Double Empathy Problem dialogically, from a second-person perspective. This requires non-Autistics to set aside their neuroprivilege and to put just as much effort into trying to understand Autistics as the latter have historically had to put into trying to understand the former. Thus adding the second-person perspective can enhance the form-of-life hypothesis. Chapman, for instance, criticizes the conception of Autism as a deficit in the capacity for intersubjectivity because it fails to take seriously Autistics' first-person experience, but they do not consider the role of the second-person perspective in, say, addressing the double empathy problem.

All of that leaves unanswered questions about how best to understand, study, and support normal Autistic development, questions with far more salience to the Autistic community than all of the past decades of science attempting to explain how Autistics are broken. It is time not merely to include Autistic voices in Autism research, but for Autistic-led efforts to study questions of importance to Autistics.

8.6.2 Ecological Psychology and Embodied Cognition

Our analysis is in line with a growing movement away from "a medicalized and deficit-centered model of Autism" to a view that focuses not only on Autistics and their perceived inability to interact with and understand others, but their context—a context that

> is basically composed of and shaped by non-autistic people. In other words, it is all about adapting to the non-autistic rules and interpretations of how social interactions should work and be understood. A transactional view like this requires that both the individuals, their contexts, and the interaction between them should be the focus of attention.
>
> (Erena-Guardia, Vulchanova, and Saldaña 2023)

Gibsonian ecological psychology (and 4E cognition more broadly)[14] lends itself well to thinking constructively about Autistic contexts. A key notion for ecological psychology is that of affordances (Gibson 1986; Heft 2001), which are ways in which features of our environment foster or enable some sort of behaviors and inhibit or outright make impossible others. Considering a child's environment in terms of affordances, for instance, allows teachers to understand the impact of sensory overload on Autistic people, with an eye to altering the *environment*, including how other people in that environment behave, rather than focusing merely on the behavior of the Autistic child. This is quite different from how ABA considers the environment. Lovaas emphasized "adapting neurotypical environments to suit the needs of autistic bodies" in order to make that environment "therapeutic and educational" (Yergeau 2017, 110). The present Gibsonian goal, by contrast, is not to make the Autistic child conform, but to identify and remove triggering factors so as to make the environment more accommodating of Autistic difference. This fosters a) understanding that an Autistic child striking or pushing a neurotypical child may be a rational act of self-defense aimed at reducing harmful stimuli; and b) making the environment less

overwhelming and threatening to the Autistic child by, among other things, educating the neurotypical children about how their actions affect others and changing *their* behavior. Consistent with double empathy, this kind of sensitivity to the environment respects the dignity and identity of Autistics.

8.7 Conclusion

There is a growing number of openly neurodivergent therapists and a broader movement of labeling therapy practices as neurodiversity- or neurodivergence-affirming. The key starting point of these practices is that there is nothing wrong with a neurodivergent child. To be sure, a neurodivergent child may have co-occurring conditions which might require medical assistance, but these conditions should always be discussed independently from the child's neurodivergence. Practitioners of neurodivergence-affirming therapies explicitly grant neurodivergence status as cultural differences. "Some neurodivergent groups form 'neurominorities', which refers to minority neurocognitive groups who are disadvantaged in a particular society. This reconceptualizes disabilities such as autism, ADHD, and developmental coordination disorder in line with how cultural, ethnic, and sexual minorities are conceptualized" (Chapman and Botha 2023; Catala 2024). This perspectival shift away from the medical conceptualization of Autism as a pathological disorder and toward seeing it as an equally valid way of being leads to a profound shift in the modalities of therapy offered. Furthermore, these neurodivergence-affirming strategies, in stark contrast to ABA, provide a pathway towards vastly improved relationships between parents and children by fostering better mutual understanding. Providing parents with an understanding of their children's cognitive differences and agency will allow for parents to have much stronger empathy for their Autistic children[15] and better provide for their specific needs.

Ideally, placing Autistic behavior on a par with non-Autistic behavior will yield a more critical view of non-Autistic behavior that causes problems for Autistics. For example, just as non-Autistics understand that they can't take disciplinary action against, say, Dutch colleagues for being too direct and blunt, they must extend the same courtesy to Autistics. And just as it can be perceived as racist to mischaracterize the indirect communication styles of some Asian cultures, it should be seen as ableist to label Autistic communication as inherently wrong or deficient. This shift should also help clarify that there is a limitation to the extent to which non-Autistic people can be experts in Autism in the same way that anthropologists can speak of other cultures but not for those cultures.

If Autism is a form of life and better understood as a cultural identity than a medicalized disorder, ABA is a radically inappropriate approach to Autism and the idea of "eradicating" Autistic behavior takes on a radically different connotation. We cannot have both Autistic culture and identity *and* ABA, which now reveals itself "as a kind of cultural annihilation" (Yergeau 2017, 77). Because we reject the assumption, central to ABA, that Autistic people should change their behavior to conform to neurotypical behavioral standards, we have argued that Autism should be conceptualized in terms of neither a behaviorist nor narrowly neurocognitive model, but in terms of a biosocial model, a Gibsonian ecological psychology and embodied theories of cognition. One of the implications of this understanding may be that the study of Autism ought to be informed as much if not more by anthropology and philosophy as by psychology and neuroscience. Whereas ABA is in the business of stifling the voices of Autistics, anthropology has long grappled with including its subjects

in its knowledge production, not to mention with the notion of cultural difference and with the very concept of culture. What exactly it means for Autism to be a culture or form of life warrants further investigation.

8.8 Coda: Collaborating Across Neurodiversity

This collaboration has been the first of its kind for both of us, and much of it has been nothing short of exhilarating. Overall, we discovered that our respective intellectual backgrounds, energies, and styles are productively complementary. We chose to write (mostly) in a unified voice, rather than creating a polyphonic text or dialogue. This required us to engage in careful dialogue as part of the writing process—the kind of dialogue across difference that we advocate in the chapter. Joint writing is a very intimate undertaking and both of us appreciate the insights we have gleaned into the workings of each other's minds—bouncing ideas off each other, fine-tuning steps in the argument, organizing our thoughts, and polishing our writing. Whether the differences in our ways of thinking reflect differences between being Autistic and being neurotypical or whether they simply reflect differences in human cognition is largely an open question. (A sizable literature in pedagogy emphasizes different learning and thus thinking styles without attaching such differences to cognitive "deficiencies" or pathologies.) The dynamic of our working relationship significantly shaped our thinking about Autistic Readings, especially the breadth of the criteria that could be allowable. Success in life for many Neurodivergent people is dependent on them forming enduring symbiotic relationships in which their weaknesses can be seen as differences not deficits; and their strengths can be valued on their own terms. This collaboration is a testament to how powerful such dynamics can be.

Notes

1 The starting point of a paper on "Psychiatric Comorbidities in Children with Autism" is a standard example: "Autism spectrum disorder (ASD) is a neurodevelopmental disorder with social communication deficits, restricted interests, and repetitive behaviours. In this lifelong condition the core features that cause impairment may also be expanded by Behavioral and emotional problems" (Ivanovic 2021). We return to the question of Autistic people suffering from multiple mental health issues below.

2 We also note that Baron-Cohen is a scientific advisor providing "scientific review and strategic thinking" ("Autism Impact Fund Team," n.d.) to an investment fund which invests in, among other things, the delivery of ABA services, the development of scientific tests for earlier detection of Autism specifically to start ABA earlier, and in prenatal tests for "assessing the risk of having an autistic child" ("Autism Impact Fund Portfolio," n.d.).

3 Autism Speaks is an organization that speaks not for Autistic people, but, at best, for non-Autistic parents of Autistic children. The organization has in the past advocated for eugenics-based approaches to Autism, and perpetuates negative stereotypes of Autism and Autistics. While there have been recent unsuccessful efforts by younger members of the AMA to move it away from endorsing ABA, the medical involvement in Autistic lives is so far largely unquestioned from within the organization. The APA and AAP recommend ABA as well as developmental social-pragmatic therapies and the American Academy of Child and Adolescent Psychology recommends a combination of behavioral and educational therapy as well as therapies to improve communication, etc. Behavioral approaches are not confined to "treating" Autism, but are widely used in clinical psychology–which speaks to the continuing influence of behaviorism in our society at large, even though it may be largely discredited in theoretical psychology and philosophy.

4 The Treatment and Research Institute for Autism Spectrum Disorders at Vanderbilt's Kennedy Center ("Vanderbilt Treatment & Research Institute for Autism Spectrum Disorders, TRIAD,"

n.d.) is representative of the kind of information and resources such centers provide. The emphasis is blatantly on behavior modification and eradication. There is little if any recognition of Autistic strengths, let alone of Autistic identity as something to support.

5 Autistic children are, with some frequency, murdered by parents who are forgiven and sympathized with based on them having been pushed beyond Human endurance by having to care for an Autistic "beast." Sympathy is never expressed towards the murdered child and the parents are never prosecuted. Because of course it is always the parents who are seen as the real victims.

6 This is not necessarily a trait unique to Autistics; Barbara, too, has had similar experiences. We are not claiming that such experiences by neurotypicals are equivalent to the experiences of Autistics, but we do think that noting such analogues and similarities can offer useful starting points for increased mutual understanding.

7 This is part of a broader issue about how sensory differences work; Dani often finds himself talking to parents and encouraging them to ask questions about their child's environment. Given that Autistic sensory differences generally not only present in different people as either hyper- or hypo-sensitivities, but they can oscillate between these two states within individuals, it seems plausible that a foundational error here is trying to identify Autism as a state while Autistic people experience it as a process. (This variability within a single person may well apply not just to sensory differences, but to all Autistic traits. The idea that a single person might sometimes be hypo-empathetic and sometimes hyper-empathetic seems likely closer to reality than the either-or construct used in most autism research and closer to how we think of neurotypical experience as well.)

8 While ABA practitioners are resistant to the suggestion that ABA is causing harm, there is a rich literature on the psychic damage done to children by telling them that their way of doing things is wrong. Whether it is men denigrating women; white people denigrating other races; cis-het people denigrating LGBQT+ communities; etc., there is substantial documentation of how the denial of identity can result in mental health challenges up to and including suicidality. ABA practitioners dismissing reports of ABA causing PTSD, other mental health issues, and suicidality seems particularly jarring when seen alongside this broader human-rights view of the challenges. The idea that one could deny the identity of a child, up to and including a refusal to meet that child's basic needs until they are communicated in a way chosen by the parent or practitioner rather than the child, without causing harm seems deeply suspect.

9 Robert Chapman identifies two strengths of neurocognitivism, which jointly help to explain why it has been the dominant framework for conceptualizing Autism. One is that it can provide a "clear explanation of autistic experience and behaviours from the inside out" by attributing autistic people's behavior and the social and communicative difficulties they face to fundamental cognitive differences from neurotypical people. In other words, this is exactly what behaviorism fails to do. The second reason is utility in improving Autistic lives "based on the premise that characteristically autistic problems can be dealt with from the inside out by utilising the cognitive strengths associated with autism [e.g. systematizing thinking] to overcome the issues associated with autistic cognitive limitations [e.g. understanding emotions in facial expressions and context-blindness]." In a way, therefore, neurocognitivism opens the possibility of very different support strategies for Autistics. Yet, as we shall see below, Chapman, too, is critical of neurocognitivism.

10 It might be more accurate to speak more broadly in terms of a "Neurodivergent" reading. Given the scope of this chapter, we chose to stick with "Autistic reading."

11 We do not, of course, want to homogenize or essentialize Autistic people; they may disagree about the validity of any given interpretation of phenomena or data. Indeed, Robert Chapman is critical of neurocognitivism because it is essentializing and fails "to take into account embodied, interactive, relational, and developmental processes that are partly constitutive of autistic thinking." There are, they point out, no "core traits that have been found to be shared by all or most autistic people, or that can explain all characteristically autistic traits." Moreover, the fact that different researchers seek to identify opposed and contradictory traits (hyper- vs. hypo-empathy, for example) has led some to question the possibility of a unified theory of autism and others to jettison the concept altogether (Chapman 2019, 423–24).

12 Referring to different people as being "more" or "less" Autistic, or to have different levels of "functioning" is inappropriate and wrong because it obscures the similarities among Autistic people. Use of this language often results in people who have lower support needs being under-supported when successful masking is confused with healthily coping. Similarly, many higher

support-need individuals, especially non-speakers, have ended up being even more deeply marginalized when communication differences have been interpreted as low intelligence. Moreover, non-speaking has often been met with extreme, sometimes lethal, violence by ABA practitioners who have interpreted not speaking as stubborn resistance. Finally, "nonverbal" is considered derogatory as it implies a lack of the ability to use language. This community prefers to be referred to as nonspeakers.

13 Rebecca Jordan Young has demonstrated this masterfully for research on "the gendered brain" (Jordan-Young 2010).

14 4E cognition refers to the idea that cognition does not occur solely in the brain, but is embodied, embedded, enacted, and extended. Gallagher is one of the main proponents of this view.

15 Although "much stronger empathy" may be vastly understating the case. In communicating with non-Autistic parents of Autistic kids, Dani has noticed a striking tendency of parents speaking of their children as if they are objects. Even simply asking an eight-year-old why she hates going to school needed to be suggested, as it hadn't occurred to the parent that their child would have anything to add to their understanding of what was going on. The parent sounded genuinely surprised when the child was able to articulate clearly what the issue was.

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9

MASKING AS PERSONA FLEXIBILITY*

Emil Eva Rosina and Elin McCready

9.1 Challenge: The Mystery of Unmasking

"Masking" is a term used to capture the impression that many autistics are "hiding their true self"—often unconsciously until the first autistic burnout (Kurchak 2022, 165ff). The process of consciously choosing to stop masking has been termed *un*masking (see Price 2022).

There are two dominant conceptions of masking. On the first, "hiding one's true self" can be understood as hiding the fact that one is autistic by over-adaptation to neurotypical behavior and trying to pass as neurotypical by not showing "autistic behavior" (like stimming or infodumping) (Kurchak 2022, 144ff). This conception of masking seems straightforward at first sight, but it relies on a pre-defined or observed set of "autistic behaviors"—while at the same time trying to capture the fact that many autistic people do NOT show such behavior, instead resembling neurotypicals to the degree that it poses a problem for diagnosis (Attwood 2015, 10, 16; Kurchak 2022, 146). This view comes with the implicit commitment to an essentialist concept of autism—assuming a core of autism that is shared by all and only autistic people for all of their lives, visible or not—or at least one that assumes *dispositions* to a certain non-occurrent behavior (for the metaphysical debate, see Cushing 2013).[1]

Second, and less straightforwardly, masking is also sometimes in the literature linked to self-constitution in a more general sense.[2] "Hiding one's true self" under this conception is to be understood as hiding (not one's autism, but) one's particular character traits, interests, beliefs, and mannerisms. "Autistic behavior" is often a part of what is masked, but it may not exhaust it. Importantly, struggles around masking and unmasking under this conception are a distinct phenomenon typical for many autistic people, and potentially causally explanatory. We want to explore the idea that feeling like one is (fighting against) "hiding one's true self" is central to autism (as it is present in most actual communities, i.e.

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in contrast and confrontation with neurotypical communication), rather than just a consequence of being marginalized qua autism, "a response to autism-related stigma" (Petrolini, Rodríguez-Armendariz, and Vicente 2023, 3, summing up common views).

This second take on masking also makes sense of instances of the first, and it is closer to people's concrete struggles. Hiding a stimming toy in one's pocket can be less (self-)harmful to autistic people than not having spoken up against racism, thus having failed to meet one's own ethical standards (as we will later spell out in terms of Discursive Sincerity). While anti-racism is hardly an autistic trait, the feeling of social and moral failure and the associated self-disintegration surely are—independently of the concrete belief set of a given autistic person. Our anecdotal evidence for this, based on numerous private conversations, is supported by the fact that the core exercise in Price (2022)'s bestseller "Unmasking" consists in finding a coherent story of one's own values and personality over time. We think that this second conception of masking is more promising to investigate philosophically, even though—or maybe because—it raises more questions than it answers.

One such question is what to do with the notion of a "real self" here. Those who unmask describe doing so as universally healing, unlocking increased felt authenticity and having all sorts of positive effects on mental health. But when we have not reached this enlightened state, how do we know that we are masking a "more real" self, and what does it consist of, if not our actual behavior and conscious feelings?[3] In fact, there is significant disagreement in autistic communities about which common autistic behaviors are effects of masking or unmasking. For example, alongside the socially withdrawn autistic type, the new type of the eccentric, polyamorous party person with the "fuck it" attitude has received increasing attention. While some autistics describe their outgoing side as a "clown mask" that exhausts them (so for them, unmasking would consist in standing up for their need for solitude and quietness), it is *the* result of unmasking for others (rendering their socially withdrawing side the mask).

Finally, a critical examination of the concept of unmasking is also called for in the light of debates on self-identification as autistic. In the past years, identifying as autistic has become more common also for people who used to "pass" as neurotypical weirdos in the less autism-aware environments of their childhood. A mountain of self-help and autobiographical literature (Price 2022; Kurchak 2022) has flooded the book market, directed at those autistic people who benefit from reading about and reflecting on their neurodivergence. Often, these books are most interesting in the early stages of identification as autistic, or are used as a tool for self-diagnosis. Many autistic authors of such books try to avoid presenting their experience as universal (Kurchak 2022, ix–xi), or identification as autistic as necessary for the reading to be helpful (Price 2022, 11–2). Still, due to little previous education about autism, the typical reading experience is an aha-effect. ("OMG, this is me!", "Other people feel like that, too?!", "I had no idea that [autistic trait *x*] has to do with my autism!".) This can come with a strong sense of finally belonging, and a focus on this newly discovered identity that can feel like a life-changing revelation. Self-identification as autistic in this community sense (beyond just accepting a diagnostic label to receive state support) requires a *positive* or at least accepting attitude toward one's neurodivergent traits. For this reason, it often comes in a package with unmasking *as a goal*: As soon as one identifies with these sides of oneself, the expectation grows that the people surrounding one should be able to deal with them. The path of unmasking can be very mentally rewarding in the right surroundings, and so it is tempting to advertise for it in conversations with other people perceived as neurodivergent. The task to unmask is then commonly tied to specific dos and don'ts depending on the other's conception of autism.

("You should respect your need for solitude and tell your friends to meet you online". "You shouldn't worry so much about hurting other people's feelings by miscommunication". "You should sing and dance in the streets without giving a fuck".)

The philosophical challenge here is to take seriously self-reported positive effects of unmasking specifically as an autistic phenomenon, while at the same time doing justice to people who may locate themselves under the big umbrella of neurodivergence (or not), but who may not view their diagnostically labeled-as-such autistic traits as central to their character, and who are clearly able to live happy lives without a conscious path of unmasking. Unmasking is not a patented recipe unique to autistic people, either. Many people's situations are improved by being true to themselves in the right surroundings, and many people, across neurotypes, seek to change surroundings that do not provide space for their "true self". Why then is this issue so much more dominant in conversations and literature around autism?

In the rest of the chapter, we present a new idea about what lies at the root of masking and unmasking, and how this vague "being true to oneself" is to be understood. Our proposal will address and partly answer all of the above concerns. It is inspired by rhetorical proximity in the literature (without any concrete causal story, as far as we know) of the un-/masking issue to the observation that the expectation of "appropriate" behavior which depends on *changing* social contexts renders many autistics "social chameleon[s]" (Price 2022, 56).[4] We link this with existing criticism of the picture of one mask that can be put on and off with the true self underneath as simplistic. Kurchak (2022, 150), for instance, favors the metaphor of a "multiheaded, deeply embedded parasite" both harming the autist and keeping them alive. We want to explore the idea that the "multi-headedness" of the mask, or its plurality, is not only a complicating factor, but rather the core of masking.

9.2 Preview of Our Account

We claim that the core of autistic masking (or "camouflaging", which we take to be synonymous) is mimicking neurotypical communication *by showing different personae in a way depending on the social context*, [5] in other words: playing several social roles, the compatibility of which is questionable/a matter of viewpoint. While such behavior is expected by most neurotypicals, it feels dishonest to many autistics because of to higher standards around sincere self-presentation. We model this in terms of two principles: Social Sincerity and Discursive Sincerity.

As a background for both, we introduce Burnett (2017)'s persona resolution in section 9.3, and motivate the application of this framework to masking autistics' appearance as "social chameleons". Masking is over-adaptation to the predominantly neurotypical practice to signal one's interlocutor only a part of one's personality, and only indirectly so. In section 9.4, we introduce Social Sincerity (as defined in Henderson and McCready 2023, 135), which roughly amounts to actually believing x-many of the propositions that ground the persona one is currently presenting. We hypothesize that Social Sincerity is not one generally shared principle but comes in different degrees relative to the concrete speaker or listener. Many autistic people have high Social Sincerity standards. The gradient nature of these standards comes with the advantage that we can account for the multi-dimensional and spectrum character of masking and of autism in general.

In the next step, we introduce a second principle, Discursive Sincerity, which indexes the degree of necessity one assigns to presenting one's actual views to an interlocutor in all contexts.

Again, we claim that many autistic people have higher standards in that respect. This will account for the feeling of moral failure we discussed as an explanandum in section 9.1. Both principles together account for the reported felt self-disintegration that comes with masking.

We characterize masking as one of three ways of dealing with the frequent clashes between appropriateness and one's high Social and Discursive Sincerity standards: Masking autistic people systematically do not conform to their own standards of Sincerity (but, possibly, to the standards of their neurotypical interlocutors) when trying to be socially appropriate. Our framework predicts that there are exactly two alternatives to masking in a context where one has higher Sincerity standards than one's surroundings: "unmasking", which necessarily leads to "inappropriate" behavior, or avoiding social situations altogether.

Our conception of masking is internal to the masking person's mind in the sense that it does not require any noticeable difference in behavior between a neurotypical person and a masking autistic person. Instead, the essential difference is one of self-standards. To put it simply, the two groups have different felt answers to the question whether changing social roles a lot is dishonest. This internal conception does away with the metaphysically loaded notion of *dispositional*, non-occurrent autistic behavior. It is compatible with viewing many autistic people's struggles with neurotypical pragmatics as a genetically caused disability but has the potential of deriving a focus on semantic over pragmatic appropriateness also in a non-deficit based way.

In terms of social consequences, we will argue that there is a development of misalignment and possible mistrust between people with high and low Sincerity standards: Autistic non-masking undermines neurotypicals' trust in "appropriateness", the neurotypical world undermines autistics' trust in stable-across-contexts personas. Causally centering this divide provides natural links to different expressions of other neurotypical traits like communication with low informational content, social ease, and deficits in meta-communication. Applying our model to group settings and societies in section 9.5, an analogy between being autistic in a neurotypical world and being systematically dogwhistled at will emerge. As a result, we make sense of many autistic people feeling "gaslit by the entire world".[6]

Before we go into details, note that "Sincerity" as we understand it is ethically neutral. We do not have to assume any objectively correct or morally superior standard of Social or Discursive Sincerity or standard of appropriate behavior in order to describe clashes between people's Sincerity standards. In terms of political action, high Sincerity standards might work well in some contexts and low Sincerity standards in others. Whether a person's particular Sincerity standard leads to conflict and immobilization will often be a matter of compatibility with others.

9.3 Autistic Struggles With Persona Resolution

Natural language has a multitude of functions. Focusing only on "regular" everyday situations (as opposed to, for example, literature), two important ones are exchange of information on the one hand and social identity construction on the other hand. Direct exchange of information is relatively easy to model. E.g., each person's beliefs can be seen as propositions narrowing down the set of worlds they think they might be in ("doxastic alternatives"). The exchange of information with another person then has the goal to add more such restricting propositions in order to better determine what kind of world one lives in and thereby get along better in it. This is done by uttering a sentence on the speaker's side, and by consensually adding the informational content—i.e. propositions that are either true

or false in the actual world—to the set of consciously shared beliefs ("common ground"). The sole focus on the truth-conditional content of utterances and on the function of informational exchange is widely considered a historical mistake in linguistics today. However, expanding one's knowledge about the world is arguably a more important motivation for communicating with others for autistic than for allistic people.

The second function of language that is relevant for our discussion of masking is interactive identity construction. There is a close, but complex link between who we feel we are and how we want others to perceive us in conversation. This layer of communication contains more ambiguous messages and is typically more important for neurotypicals. The process it involves can be understood as the speaker's sending clues to the listener to help them to resolve the speaker's social persona. This process can be modelled through Bayesian signaling games, i.e. implicit calculation of probabilities over social meaning (Burnett 2017; Henderson and McCready 2023). If personas are thought of as stable, the listener's task is just to decipher the speaker's identity based on signals like their choice of words between semantic synonyms. For instance, if your communication partner says "What a little Sheldon Cooper you are!",[7] knowing how many "hostile people" would use this formulation over alternatives like "What an analytic thinker you are!"—the probability of the message given the persona—can help, and so can earlier experiences with people using the Sheldon-formulation—the probability of the persona given the message. Henderson and McCready (2023), building on McCready (2012) and Burnett (2017), relate the two in the following way for the listener:[8]

1 a $P(\pi|u) \propto P(\pi)\ P(u|\pi)$
  b "The probability P of a persona π given an utterance u is proportional to prior probability of the persona and the likelihood of using that utterance given that persona"

In our extremely simplified model where only "analytic thinker" and "little Sheldon Cooper" are possible alternatives, we can move from proportion to concrete probability by making use of the prior of the utterance "little Sheldon Cooper":

2 $P(\pi|u) = P(u|\pi) * P(\pi)/P(u)$

Suppose that you remember 10 instances of people commenting on your style of thinking in some way, and in 8 of these cases, the speaker used the Sheldon formulation, so $P(u) = 0.8$.[9] In general, before hearing them say anything, you have come to believe that 4 in 10 people around you have a negative attitude toward your autism, so $P(\pi) = 0.4$ for π, a persona correlating with negative attitudes toward autism. About half of the people you remember to have clearly shown such a negative attitude used precisely the Sheldon formulation, so $P(u|\pi) = 0.5$. A new person has just said "What a little Sheldon Cooper you are!", and you want to know how likely it is that their statement is used to express a negative attitude, so $P(\pi|u) = ?$. Following (2), $P(\pi|u) = 0.5 * 0.4/0.8 = 0.25$, so 25%. If the Sheldon formulation was less generally common, $P(u) = 0.4$, the likelihood that it was insulting this time goes up, $P(\pi|u) = 0.5$. If autism-negativity was generally less, $P(\pi) = 0.2$, the likelihood that this utterance is an instance of it would be lower, $P(\pi|u) = 0.125$. Finally, if almost all autism-haters from your past had used the Sheldon formulation, $P(u|\pi) = 0.9$, the likelihood that you are being insulted again would increase, $P(\pi|u) = 0.45$.

Unfortunately for many autistic people, while this process looks to give a correct result, it is not the end of the story: speakers don't communicate one "true" stable identity across

situations, but unconsciously consider the likelihood that the listener will come to this conclusion given that choice of words, and want to make a particular impression, which influences their wording, which has to be taken into account again, and so on.

Autistic people appearing as "social chameleons"—which we identify with masking—can be thought of as changing persona "too much". This can be understood either as "too much" for neurotypical standards or as "too much" for it to be mentally healthy. If only the first interpretation were on the right track, there would be no problem with masking at all except that it is not widely accepted, and using the notion of "too much" without any qualification would be ableist to begin with. Since many autistic people report some degree of suffering from their own masking, however, our proposal will go in the latter direction, understanding masking as "too much" persona flexibility for one's own standards, and so "too much" to be mentally healthy.[10] At the other extreme, we identify autistic behavior appearing inappropriately "out of context"—a consequence of unmasking in this world with context-dependent standards of persona presentation and standards of appropriateness—with "too little" changing of persona by neurotypical standards.

As a listener, being unaware of the connection between a certain message and a persona—for example because of focusing on "literal meaning", a common "autistic trait"—is a disadvantage in the kind of situations modeled by social meaning games, because it makes miscalculations of people's personas more likely.[11] This effect strengthens with time, because with every piece of communication that leaves the hearer confused or holding a wrong belief about the speaker's background beliefs, the prior probabilities diverge further. The resulting misalignment of priors makes social life amongst people who smoothly change persona in dependence of context extremely exhausting and socially (as well as, in the case of divergence resulting in one not recognizing hostility, potentially physically) dangerous, contributing to social anxiety and generalized mistrust (results shared with many Borderline Personalities, leading to diagnostic overlap: Price 2022, 76–7; see Mason and Kreger 2021 for BPD and trust).

If we switch to the speaker's perspective, having little clue about the listener's persona (and consequently their beliefs, identity, ideologies, and attitude toward the speaker) makes it harder to choose the persona that results in the impression one wants to give, so if one wants to continue the conversation at all, one either has to put a lot of energy into consciously compensating for these processes that are automatic for neurotypicals—i.e. masking—or instead reveal a stable, more "real" persona without much differentiation between contexts—i.e. unmasking.

The problem with the picture so far is that it does not do much to explain why the very behavior that is regular persona variance in neurotypicals is called "masking" in autistics. It seems that contextual flexibility is the social optimum when you are neurotypical (and good at it), but becomes a "compensatory mechanism" (Attwood 2015, 38) and something that should be eliminated when you are autistic (and bad at it, DSM-5: A3).[12] The causal story for this so far rests entirely on autistic people's reliance on literal over social/contextual meaning, which must appear either as a stupidity (because it makes persona resolution so much harder, leaving only the choices of masking, which is exhausting, and socially prohibited unmasking) or as an impairment (if there is no choice). Depending on one's concept of impairment and disability, this result might not be unpalatable, of course, but we will show that seeing it as the one causal root of masking is not *necessary*.

More importantly, if masking vs. neurotypical persona variance was only a matter of cognitive costs and exhaustion, the link to self-identity that many autistics report is not

clear: while "adopting an alternative persona can […] lead to confusion about self-identity" (Attwood 2015, 16) in autistics, neurotypicals do it all the time without feeling bad about it or appearing awkward. Adding the concepts of Social and Discursive Sincerity to the picture, we will now offer a less binary and less deficit-based explanation for these different experiences.

9.4 Reversing Causality: Social and Discursive Sincerity

It is also intuitive to think of the causal relations as reversed, as soon as we add variable self-standards related to something vaguely linked to honesty (to be specified below). If you refuse to show a different side of yourself in every distinct social context because that seems dishonest to you—in other words, if you choose to unmask—there is less use in deciphering hidden messages via developing beliefs about other people's personas. In this situation, both a focus on literal meaning and the eccentric autistic's "fuck it" attitude are natural consequences. In the rest of this section, we will explore this intuition a bit more precisely, starting with making the divide between autistics and neurotypicals fuzzier.

Neurotypical standards do not encourage *unrestricted* flexibility in persona presentation, and no "un-masked" autistic behaves exactly the same in all contexts. We can think of this in two distinct ways, both of which involve notions of sincerity.[13] Henderson and McCready (2023, 135), use "Social Sincerity" to describe a restriction on persona flexibility:

3 Social Sincerity: If a speaker utters a sentence compatible with persona π, they believe a significant number of the propositions comprising the basis for π.

We claim that the vagueness of "a significant number" is the cause of what has to many seemed to be a clear divide between neurotypical and autistic people:[14] Every individual has a different threshold for the number/proportion of matching beliefs the speaker has to hold to sincerely present a given persona. Still, speakers can be clustered together into roughly two groups of speakers (with borderline cases between them, as in any instance of vague predication). For example, two people holding the same fixed set of feminist beliefs might differ in whether they meet their own sincerity standards only by presenting the persona "hardcore feminist" across contexts or also by presenting a "mild feminist" persona where needed.

Autistic people tend to be more demanding in this respect.[15] As a listener, this means that discovering the third little mismatch between a persona presented and the speaker's beliefs (or a very different persona from that presented by the same person in another context) might constitute a (perceived) breach of Social Sincerity (contributing to social anxiety and mistrust) where only the 10th mismatch would for a more "tolerant" person. As a speaker, conforming to the level of persona flexibility observed in others feels Socially Insincere over time, because being stricter with respect to Social Sincerity leaves fewer sincerely presentable personas as options. We claim that this is the core of what has been called masking.

Note that the masking speaker with high Sincerity standards can behave the same and hold the same beliefs as the "Sincere by their own low standards" speaker, so this is a purely internal notion. Even perfect masking unconsciously contributes to self-disintegration because the overlap between the personas presented is too small to meet one's self-standards. A nice feature of this analysis is that we have now explained self-perceived self-disintegration without any reference to one singular real or unchangeable self that is untouched by society.

The beliefs one holds frequently undergo changes without any friction with Social Sincerity, which is evaluated relative to the *current* beliefs held by the speaker.[16]

There is another important aspect of sincere speech with respect to social personas. Observe first that seemingly "extreme" political positions are often just positions with thought-through and fully considered consequences (combined with good ideologies for good extremes, bad ideologies for bad extremes) coupled with a refusal to take people-pleasing middle/vague positions. Congratulating your trans co-worker on her name change while on the next day nodding when your boss utters "concerns" about easier accessibility to such name changes is not an option (that feels good) for many autistic people because it involves wearing two different personas, at least one of which is a mask. But are these personas genuinely inconsistent?

Henderson and McCready (2023) discuss related issues when considering entailment for social personas. Can one social persona "entail" another? Suppose persona π requires one to subscribe to a set of beliefs B in order to be sincerely presented and persona π' another set B' such that $B \subset B'$. Then, intuitively, does the sincere use of π' entail that one could also sincerely use π? Concretely, is "hardcore feminist" a stronger version of "soft feminist"? If so, one might expect that the two are consistent, because any belief set that satisfies Social Sincerity for π_{HCF} will also satisfy it for π_{SF}, because the latter is weaker.

In principle, this is not intuitively implausible. One might indeed agree with certain aspects of the "mild feminist" program but go further and so qualify as a "hardcore feminist" while still holding some "mild" beliefs. However, it might be that the "mild feminist" ideology contains some propositions which are negations of some of the hardcore feminist ones. Mild feminists might, for example, assent to the negations of certain propositions about bodily autonomy that hardcore feminists would uphold. The question is whether this lack of possible assent corresponds to a difference in the explicit beliefs which underpin Social Sincerity, or if they are rather inferentially based, in something like the manner of Gricean Quantity implicatures on which saying "I ate some of the carrots" implicates "I did not eat them all" by virtue of assumptions about cooperative communication according to which one should provide as much information as possible to answer the question on the table. If the speaker wants to know if there are still carrots, a cooperative speaker should make it clear if they know there are not.

Henderson and McCready (2023) concluded that requiring speakers to make their social and ideological positions fully explicit is not plausible, and so implicative relations don't hold between social personas. This seems right—but only for speakers who use the classic neurotypical speaking strategies which for many autistic speakers are considered to be masking.

We can think of this difference between persona presentation strategies as another type of Sincerity. Social Sincerity is concerned with the presentation of one's "real" beliefs: if one's beliefs don't track what the persona signals, one shouldn't use the persona. Social Sincerity, though, has nothing to say about when we should or shouldn't in practice present a persona that passes the Social Sincerity test. Do we have a (perceived) obligation to "speak our truth"? Social Sincerity says we shouldn't present a falsehood, but not that we should necessarily show what we actually believe. For this, we need a new notion relating to sincere communication around social meanings, which we dub Discursive Sincerity:

4 Discursive Sincerity: If a speaker can, according to Social Sincerity, present a persona, they should do so.

Other considerations can of course override this normative statement—politeness, topicality, and so on—but we want to suggest that the degree to which a speaker feels a pressure to abide by Discursive Sincerity to the exclusion of other such factors also plays into whether they will feel comfortable masking or not. A speaker who highly values Sincerity would feel uncomfortable insincerely presenting personas, because of Social Sincerity, and also uncomfortable remaining silent about their positions, because of Discursive Sincerity. These two subprinciples of Sincerity are independent of one another in the model and can be followed to different degrees, in principle, but, for many autistic people, they come together and yield a general discomfort with masking behavior.

On the (typically neurotypical) side of the listener with low Sincerity standards, it can be irritating to be confronted with unmasked communication. Many situations render "appropriateness" incompatible with high Sincerity standards. (The only option to avoid the choice between inappropriateness and Sincerity is to leave the space or avoid entering it—reflected in autistic social withdrawal.) Therefore, unmasking people behave "inappropriately" more often (= the eccentric autistic's "fuck it" attitude, Price 2022, 67ff, 214). For the listener with lower Sincerity standards, this inappropriateness appears unnecessary, because by their own standards, there would have been alternative personas which one could have presented instead.

Simplifying, an unmasking feminist calls out their boss for a misogynistic joke in a way that appears inappropriate, the masking person suppresses an urge to do so and so violates their own Discursive Sincerity standards, and the stereotypical neurotypical feminist mumbles "well, maybe it shouldn't be put quite like this", meeting both their own Sincerity standards and letting appropriateness (in this case combined with a possible fear of more direct disadvantage) win out by presenting the "mild feminist" persona.[17] The irritation caused by unmasking at the cost of appropriateness can be linked to mistrust in, typically, neurotypicals, and Insincerity by high standards to mistrust in, typically, autistics. This straightforwardly accounts for the cycle of mistrust reported in many neurodiverse relationships.[18]

Moreover, centering different standards of Sincerity directly accounts for the link between masking and self-disintegration, as well as the diagnostic overlap of autism with borderline personalities: The discomfort with many neurotypicals' flexibility with respect to personas is mirrored in discomfort when one tries to do the same, because it feels Insincere and leads to the feeling of missing a stable identity across contexts. This is in line with many autistic people's reports that conscious unmasking led to a sense of a more stable identity and reduced the fear of different social contexts meshing (see e.g. Price 2022). At the same time, viewing an extremely common social behavior as Insincere is not exactly promoting trust in other people. If that trust is maintained somehow, however, it is easier to be maintained for almost everyone, because differentiation again requires persona resolution—leading to the outside impression of naiveté, and as soon as we add sufficiently negative experiences, a lingering mistrust of other people and "the world".

While we have focused on the broader notion of masking as "hiding one's true self" and on verbal communication, the narrow notion of hiding autistically coded behavior is also captured in our framework: Let us, say, associate "stimming" with the persona "autistic person" and "holding eye contact in conversations" with the persona "neurotypical person". Then forcing oneself to make eye contact can be described as a breach of Social Sincerity (it is signaling a falsity) and suppressing an urge to stim as a breach of Discursive Sincerity (not signaling a persona one could signal).

The claim that many autistic people have higher Social and Discursive Sincerity standards is yet to be empirically investigated in this precise form, although there is much to be read about the importance of honesty and trust for autistic people (AutSciPerson 2021; Bagnall et al. 2022 a.o.).[19] Given that this psychological research and forum topic can be empirically linked to Social and Discursive Sincerity specifically, many apparent deficits make absolute sense as rational strategies. Instead of having to assume impaired Theory of Mind (Baron-Cohen 1995, see Pentzell 2013 a.o. for criticism) or impaired understanding of social/contextual meaning as the core of autism, we have traced many autistic traits back to internal norms.[20] Relative to high Sincerity standards, a prioritization of literal meaning (Attwood 2015, 13) and communication with high informational content ("infodumping"; DSM-5: A1, "lack of interest in smalltalk") is rational, and appropriateness must go overboard in many contexts. Further, Discursive Sincerity also requires "infodumping" one's social personas and, by extension, ideological positions. If this is not an option, people with high Sincerity standards who cannot live up to them may seem like the average neurotypical from the outside but will sooner or later suffer mentally from their masking. The third option (that seems to work quite well for many autistics but leads to loneliness in others) is to avoid situations in which a conflict between Sincerity and appropriateness could arise altogether, and only have very limited, known to be safe social relationships.[21]

To sum up, including the one factor of Sincerity in our model grounds all three roughly grouped types of autistics floating around in the discourse—the clown (unmasking), the social chameleon (masking), and the socially withdrawn (neither). It is not necessary to tie any absolute hierarchy to this three-fold distinction. While unmasking is surely the mentally healthier option in relatively safe environments, both masking and social withdrawal can be rational as well, depending on the surroundings, and depending on whether and how much the concrete individual suffers from their choice of coping.

9.5 Extension to Group Communication and Societal Factors

So far, we have focused on communication between one person with high Sincerity standards (typical for many autistic people) and one person (or a small number of people, without paying attention to group effects) with low Sincerity standards (typically a neurotypical person). In this section, we are going to extend our model to group communication and social consequences of autistic people's positions in it.

Group communication is known to be especially hard for many autistic people for various reasons. We claim that one of them is that when more people are interacting, the speaker may consider the impression they make on various subgroups, which may lead to utterance choices they would not have made in conversations with *any* of the interlocutors alone. These considerations can influence other group members for their choice of personas, and so on. More personas interact in more complex ways which, for many, poses further problems.

First, knowing that one half of the group approves only of persona A and the other only of persona B may lead people with low Sincerity standards to remain at a superficial level of small talk or to send vague messages that are compatible by their standards with both A and B. Higher Discursive Sincerity standards take this option away[22] leading to a situation with no good possible outcome. One costly option is trying to mask in a way that is accepted by the two different groups. Alternatively, unmasking in this situation is *definitely*

inappropriate for at least one of the incompatible communication partners, instead of it just being a risk as in one-on-one communication.

Beyond providing a reason for many autistic people's discomfort in interacting in larger groups (Attwood 2015, 68–9), the common fear of usually separate social contexts coming together (e.g. a romantic partner meeting one's co-workers) also makes sense in this light, because the groups are already known to have different shared beliefs in this case, and one or both might know you with a specific mask that is not compatible (given high Sincerity standards) with how the other group knows you. Further, our explanation also makes sense of the fact that many autistic people's social anxiety is directed more at medium-sized groups of semi-familiar people than at large groups of strangers in very anonymous or clearly formal settings: The latter settings typically do not involve any sanctions for failing to decipher people's personas, and it is reasonable to assume that the other people do not know each other's personas either. There are probably many clashes between everyone's actual beliefs, but they remain in the dark *for everyone*. In contrast, in a medium-sized group, some socially skilled people might figure out some of the other personas by artful choice of semi-small talk and have a social advantage compared to the high Sincerity listener. One might suspect some clashes between the beliefs of subgroups based on previous interactions, but fail to deal with them in a helpful, self-protective way.

While everything we have said so far points in the direction that group conversations with people with similar Sincerity standards are necessarily less conflicted, this is not case: If one has high Sincerity standards, another person with high Sincerity standards in a group always comes with the risk of turning an anonymous, formal setting into one with the persona resolution struggle described above. For example, an autistic unmasking person may feel the need to raise "the trans agenda" at a dinner table to meet their Discursive Sincerity standards, forcing another autistic person in the group to make the choice between unmasking, masking (e.g. by changing the topic), or leaving the situation. This means that it is not just compatibility in terms of Sincerity *standards* between interlocutors that leads to conflicts, but that the standards themselves are less compatible with group situations given conflicting beliefs and some degree of discomfort with these.[23]

Hence, our framework gives a somewhat complex answer to the question whether autistic masking is just a response to stigma. This is not the case on a narrow notion of stigma, such that all struggles would be gone if only neurotypicals had a more accepting attitude toward autistic people. It is also not the case in the sense that all problems around masking would be gone if all people just had high Sincerity standards. Instead, masking as we describe it is caused by society qua social sanctioning of openly deviant beliefs and behaviors in general.

The above reasoning already assumes cooperation on the part of the other communicators. As soon as some members of the group are pursuing other goals or being manipulative, things get exponentially more complex. We will now look at the case where a communicative partner communicates one thing to the one half of the group and a contradicting or neutral thing to the other.

This is what happens in the case of "enriching dogwhistles" as described by Henderson and McCready (2023). Applied to a case relevant to the present context, "supporting families with autistic children"—a valuable goal when taken literally—has arguably become an enriching dogwhistle for organizations wanting to "cure autism" because of the history of many organizations of focusing on the "burden" that the needs of autistic children supposedly pose for their caregivers.[24] If one half of the audience knows this background and

shares this view, while the other half only computes the literal meaning but would disapprove otherwise, the manipulative speaker may by using this phrasing at the same time communicate something innocent to the later, while sending the ableist message only to those people who approve of it and who have correctly resolved the speaker's ableist persona. If someone from the disapproving, non-ableist subgroup discovers this and confronts the speaker, they can always resort to the literal meaning ("What do you mean? I'm just saying we should be supportive!"). Since not every single person who wants to "support families with autistic children" actually wants to "cure autism", the speaker maintains plausible deniability—a basis for epistemic gaslighting by "neutral" bystanders (McKinnon 2017).[25]

Henderson and McCready (2023) claim that this dogwhistle effect arises from listeners being unaware (or uncertain) of the close connection between some bit of language and a persona. As we have seen, many autistic people experience this kind of unawareness a lot due to frequent misalignment of priors, and even without explicitly manipulative intentions on the speaker's side. A key feature of dogwhistles is that "there is some uncertainty in the disapproving audience (up to complete obliviousness) as to whether the expression bears the social meaning in question" (Henderson and McCready 2023, 46). In the "supporting families" example above, this uncertainty arises from unawareness about the relevant discourse and/or hesitancy to challenge due to knowledge of deniability, so anyone can be a target, independent of their Social Sincerity standards. We claim that another natural source of such uncertainty is that it is *actually* undetermined whether an expression bears the social meaning in question, because it *does* relative to high but does *not* relative to low Discursive Sincerity standards.

Take the previous example of speaking up against a misogynist joke uttered by the boss and put it in a group setting. An autistic person with high Discursive Sincerity standards is listening to their neurotypical coworker with low Discursive Sincerity standards mumbling "well, maybe it shouldn't be put quite like this". Both colleagues' actual beliefs are compatible with being a hardcore feminist, and hence also with a mild feminist persona, by Social Sincerity.[26] The neurotypical employee has no internal problem with presenting the mild feminist persona by their mild and normatively appropriate form of protest (given low Discursive Sincerity standards), and no manipulative intentions whatsoever. Their colleague with high Discursive Sincerity standards, however, may reason "if they held any hardcore feminist beliefs, they would have expressed them". With knowledge and experience of this person's beliefs from other contexts, this may become "since they hold many hardcore feminist beliefs, they should have expressed them". The only reason to not do so, given high Discursive Sincerity standards, is to pretend not to be a hardcore feminist to the part of the audience who is not already aware of it. In other words, "well, maybe…" implicates "but I'm not a hardcore feminist killjoy" only for the autistic listener (or more generally listener with higher standards of Discursive Sincerity), who may then feel betrayed by their coworker, or torn and confused in the light of contradicting experiences. In fact, the general misalignment of priors we have described for autistic people is plausibly a *consequence* of this uncertainty about personas in concrete situations.

In this sense, selecting a message which has a good chance of presenting two different personas to the different subgroups (i.e. dogwhistling) is only effectively distinct from presenting a "mild" persona (i) in the speaker's intentions (i.e. are they aware that there are multiple messages in play, and actively trying to manipulate?) and (ii) given that Discursive Sincerity standards are inter-personally fixed. When a person with high Discursive Sincerity

standards applies them to people with lower Discursive Sincerity standards, presenting "mild" personas can start to look like manipulation, because it is read as a kind of dishonesty. The practice of presenting "mild" personas is most useful in group settings where hardcore personas often clash with appropriateness relative to some group members and is especially common in groups with contradicting ideologies. Therefore, the typical autistic experience of group communication is equivalent to constantly being dogwhistled on the listener's, even if not on the speaker's side. Putting the point more directly, for the autistic person, their neurotypical surroundings are constantly dogwhistling them accidentally.

It is not surprising, then, that the consequences of being autistic in a neurotypical world often resemble those of being frequently dogwhistled at. Henderson and McCready(2023) describe hypervigilance and silencing as common effects of being exposed to dogwhistles. If mild messaging looks like dogwhistling, one will have extra reinforcement to priors that make everyone look like they're dogwhistling all the time. While the person with high Sincerity standards has good reason to be vigilant about that, it will look like hyper-vigilance to the observer with low Sincerity standards.[27] The analogy with malicious dogwhistling goes further: Since there *are* cases where dogwhistles are used innocently, a direct attack at the speaker involves a risk of being unreasonably aggressive, but on the other hand staying silent in all such cases would exhibit insufficient epistemic vigilance: we need to be careful to keep our interlocutors honest (see Sperber et al. 2010). The average autistic person who is exposed to analogous situations significantly more often than the average neurotypical person may develop a pattern of extreme internal stress about possible overshooting (diagnosed as anxiety) without actually speaking up for themselves and others in these cases ("I probably just got it wrong again")—which combined with a high value assigned to justice and honesty (via Social and Discursive Sincerity) can lead to self-hate and depression.[28]

The fate of autistic people who struggle with persona resolution, then, seems to depend to a high degree on the consequences of missing cues about other people's intentions and ideologies. The experience of understanding that, yes, I may seem socially awkward, but people still love me when I misjudge social situations and explain themselves on a meta-level when needed, and I am not in real danger: This is a universally healing experience for autistic people that facilitates unmasking. If there are, on the other hand, *actually* a fair share of enemies that one should have detected for self-protection, or if one has experienced violence as a consequence of such situations, this reinforces the cycle of mistrust, and rationally so. Autistics who are also marginalized on another axis [for example, because of being trans (Sparrow 2020) or Black (Price 2022, 61–7), in addition to being autistic] therefore have a particularly difficult time breaking the hyper-vigilance circle.

To end on a more positive note, strategies for counteracting dogwhistles are commonly found as part of autistic behavior and provide a way out in many situations. For example, taking things literally even when one recognizes or suspects an implied additional meaning (Camp 2018's "flat-footed pedantry", Caponetto and Cepollaro 2023's "bending") is both a way of telling the world to please speak in an autism-friendly way to you (though an explicit meta-comment might be nicer) and can also be specifically useful in dealing with situations where malicious intentions (and so "classic" dogwhistling) are somewhat plausible. Focusing on literal meaning even when one *could* understand indirect messages behind it is not at all stupid once understood in this light. And of course it makes sense to not train abilities that one does not want to make use of, and to not be very good at them as a consequence.

Concerning high Sincerity standards and inappropriateness, the causality may well go both ways in the form of a self-reinforcing cycle, Valuing Sincerity higher even before being socially sanctioned makes it less useful to pay attention to appropriateness as a child (because what counts as appropriate makes less of a difference for one's optimal behavior). But having an impaired sense of appropriateness (be it because of Sincerity or independently) and being socially sanctioned for it puts people in such stressful social situations that figuring out other people's personas becomes harder and harder and living up to one's high Sincerity standards becomes more and more necessary. It does not matter much to autistic people suffering from this cycle where the cycle started.

Torn between hyper-vigilance and staying silent, autistic people have also collectively tackled the problem of how to counter possible hidden messages without further deception/manipulation. Direct counters ("Hey, 'supporting families with autistic children' is a code for wanting to cure autism!") give the dog-whistler the chance to make use of deniability and portray themselves as victims. Direct counters also do nothing to challenge the question at issue (e.g. "Which aspects of parenting autistic children are burdensome and how can we support these parents?" at an inclusivity meeting). Metacommunication, which is extremely common amongst autistic people, helps on both levels. It may acknowledge the possibility of misinterpretation and challenge the question at issue: "I have read that 'supporting families with autistic children' is often used as a code for wanting to cure autism. You probably didn't mean it like that, but I still think we should be cautious with these phrasings. Also, to be honest, I don't think this is the right place to discuss the parents' perspective at length, although I can imagine receiving so little state support for your care work must be really hard". A straightforward "Wait, why are we talking about this?", "Are you assuming there is a link between P and Q? Because if you are, I disagree" or "You just changed the topic. Could we finish the other line of the argument first?" can be a source of clarity and joy for many autistic people and help the overall discourse. Just like a focus on literal meaning, we have derived metacommunication as a productive strategy in dealing with a "dogwhistling by my standards, but not by theirs" life, rather than a mode of compensation for alleged deficits.

Notes

1 Most notably, "autistic communication" proves surprisingly hard to pinpoint. For example, Jary et al. (2024), to their surprise, did not find notable differences in performance between neurotypical and autistic people when it comes to understanding a certain kind of conventionalized implicature. They attest a "general tendency in the literature for autistic individuals to perform well on tests of comprehending implicit communication, in contrast to attested and self-reported difficulties in this area" (2), attributing the gap to the quicker pace of real conversations compared to studies, the confidence to go with one's interpretations that is necessary in real-life communication, and decreased enjoyment of typical conversations (25–6). The task of the empirical autism researcher in the light of such "disturbing factors" is a mysterious one: They have to get all masking and different successful strategies out of the way to reveal the reason why many of us are – subjectively – struggling, without knowing what they are looking for.

2 Petrolini et al. (2023, 2), summing up and interpreting a range of existing literature, distinguish between masking to hide one's autism and masking ("camouflaging") to "fit in" in a more vague sense.

3 Unmasking may therefore be described as an instance of transformative experience in Paul (2014)'s sense: Since it changes our core traits and values, it is impossible to make a rational decision about whether to unmask, because we cannot appropriately imagine how it will be to be the (in a sense) new (social) person that results from unmasking; thus it doesn't make sense to apply our current value standards, but we nonetheless can't imagine the new values that we will have post-unmasking.

4 Cage and Troxell-Whitman (2019) report different degrees of masking in different contexts for many autistic people.
5 "Communication" is to be understood broadly here, including every kind of behavior that "transports a message", possibly subconsciously on all sides. We will focus on verbal linguistic communication for most of the chapter for reasons of simplicity.
6 InvisibleOneironaut @ reddit, r/autism, 2021; see footnote 26.
7 Sheldon Lee Cooper is a fictional character in the CBS TV series "The Big Bang Theory" who is coded stereotypically autistic.
8 This is a mashup of Henderson and McCready (2023)'s formulas on pages 68 and 93 in line with their chapters 3.2. and 4 and is done for purpose of simplification.
9 We assume a purely frequentist method of resolving prior probabilities.
10 It can still be the *most* mentally healthy option of several bad ones, especially in unsafe environments. We are confident that this specific notion of describing another person's behavior as "mentally unhealthy" is non-patronizing, because it is itself dependent on individual standards, so it only applies when the person is actually feeling bad about it at some level.
11 This can be related to other instances where one might miss nonliteral meaning: a failure to calculate implicatures (Grice 1975), to recognize sarcasm, and so on, traits also sometimes associated with autism.
12 Alternatively, one might want to refrain from such normative notions by claiming that masking is just *conscious* persona variance. Bayesian RSA is neutral on un-/consciousness and intentionality, so this could easily be implemented without particular repercussions at a formal level. Since conscious computation of priors is plausibly very exhausting, a de facto disadvantage is captured without on the surface talking of stupidity or impairment. We think this is just a band-aid. Deliberately *choosing* this cost-heavy and thus suboptimal strategy amounts to a kind of self-harm (which we sloppily call "stupidity" in the main text – there might be good causal reasons of course), and *having no choice* boils down to an impairment of the more efficient non-conscious persona variance ability. Note also that conscious computation of priors – something many autistic people report – does not coincide with conscious masking, which intuitively requires the additional step of consciously perceiving one's conscious persona variance as different from most people's. Statements like "I didn't realize how much I masked" by Camilla Pang on the cover of Price (2022) show that masking cannot universally require consciousness. Petrolini et al. (2023) discuss various degrees of consciousness and effort attested in the literature.
13 As such, they again relate to the work of Grice (1975), and can be thought of as aspects of spelling out Gricean notions of cooperation for other domains, as also discussed in McCready (2023).
14 Henderson and McCready (2023) note that their formulation of Social Sincerity "could easily be strengthened by using a different quantifier, or by moving over to an underlying theory which took sincerity to depend more directly on context, for instance by using a contextually determined parameter for sincerity" (135). We assume such a parameter, dependent only on the individual assessing Social Sincerity; in this way, variable strictness across individuals is modeled.
15 This is how we want this claim to be understood: If we view many autistic people as more demanding in this respect, that makes immediate sense of many of the self-reported experiences discussed in section 9.1 (as we will show in the rest of the chapter). It is one (admittedly not directly measurable, because of its character as a model) factor making several correct predictions, so it has explanatory power. Since we have a non-essentialist take on autism and not enough practical foresight, we leave it open whether it would make sense, conceptually, to make Sincerity standards with their consequences the defining criterion of autism. As the situation is now, our point is merely the following observation: Many people who have been (self-) labeled autistic in the actual world report similar experiences around "masking", and these can be made sense of if exactly these people with similar experiences are said to have high Sincerity standards.
16 This notion of "the real self" can be naturally linked with understanding coming out as queer as "unmasking" one's attraction pattern or gender without having to understand these as stable objective truths. Queer people talking about their closets is remarkably reminiscent of our conception of masking: "I will be freer, but I will not be free; inhabiting [a safer] space will not obliterate my closet, because it will not in itself obliterate [...] the mandate to submit to various institutions and pass as a person who shares the values and beliefs at the base of those institutions. [...] I will still need to code-switch into various forms of more legible masculinity to minimize violence [...] But there will be fewer presentations to manage, they will overlap more closely [...]" (Dickinson

2021, 237). Petrolini et al. (2023) explore an analogy between masking (camouflaging, in their terms) and passing (as neurotypical, in this case).

17 Perhaps the phenomenon of Socially Sincere utterances that nonetheless fail to track speaker beliefs completely could also be thought of as a method of restricting belief sets to particular ideologies. I could allow myself to temporarily become unaware that I have certain beliefs in order to present a different persona, in a way which is still, temporarily, Sincere. This is a kind of on-the-fly manipulation of propositions in awareness to match Sincerity requirements on personas. It is also extremely convenient to count it as genuinely Sincere speech. Different standards about how this behavior should be regulated would then correspond to different degrees of Discursive Sincerity. We won't explore this kind of model further here.

18 Since Social Sincerity is only one factor in mis-/trusting someone (Henderson and McCready 2023, chap. 7), another influence on the mistrust coming from autistic people could be attributed to a higher weighting of Social Sincerity over factors like shared beliefs.

19 Blaming neurotypical low Sincerity for supposedly autistic problems is implicit in many online comments, like the following, by self-identified autistic users: "The problem is that deceit is an essential part of human social interaction, and when someone is honest when they're not 'supposed' to they're seen as rude and inconsiderate". – Prometheushunter2 @reddit, r/autism, 2021

20 These can also be construed as impairments relative to the actual world, of course, based on the negative social consequences sketched in section 9.5, but this is highly dependent on how the concrete person relates to their high Sincerity standards overall. By analogy, holding certain ethical beliefs may also harm the belief holder in a narrow, individualistic sense; yet this is hardly construed as an impairment. Thanks to Franci Mangraviti for pushing us to comment on this!

21 A fourth option, in principle, could be to give up on one's Social Sincerity standards not only in terms of behavior (which amounts to extreme masking in our picture), but *as standards*, exercising conscious communicative relativism without any negative moral feelings. If this is a strategy a significant proportion of autistic people choose, they hide it very well, since sociological experiments do not identify them (Bagnall et al. 2022).

22 More precisely, few topics are "innocent enough" to qualify as small talk in the sense of being persona-neutral. Take the example of being annoyed by the German train staff striking: While this may count as small talk for a neurotypical person and does not commit them to any position on unions and strikes in general, an autistic person may feel the urge to defend the legitimate cause of the strike because of a higher Discursive Sincerity standard, making a choice between masking and unmasking necessary. A wonderful alternative that is persona-neutral by *all* standards is a non-ethical outside-world topic, like the functioning of a specific machine – but of course shifting the topic to such a thing (even with the intention of some mutually elusive infodumping which avoids messy persona-approval questions) is also frequently regarded as impolite.

23 Thanks to Franci Mangraviti for pointing us to this.

24 Regarding these "autism warrior parents", see e.g. Kurchak (2022, chap. 11). An example of their indirect communication: according to the mission statement of The New Jersey Autism Warriors (on their Facebook page, accessed on June 13th, 2024), their goal is to "provide a supportive and judgement free platform for the parents/loved ones of children with Autism. We believe every parent knows what is best for their child. This is a place to vent our frustrations, discuss questions about treatments/therapies, and meet other parents who understand our daily struggles". For a glimpse of the abuse that is a common result of many autism warrior parents' attitudes, see Friday (2018).

25 This is reflected in online discussions amongst autistic people: "Autistic people who can speak their mind don't have communication problems, it's all these other people who won't just be direct and say what they mean. Feels like being gaslit by the entire world. It's maddening". – InvisibleOneironaut @ reddit, r/autism, 2021

26 Assuming, at least, that either (a) Social Sincerity doesn't require assent to all propositions in the ideological basis of the mild feminist persona and (b) the ideological basis of mild feminism doesn't include the negations of (too many of) the beliefs of the hardcore feminist, as discussed above.

27 "I have found it safer to assume that nothing an allistic person says is true, especially one you don't know very well. And that it is best not to offer opinions on anything personal if solicited for them". Rhyothemis princeps, comment on AutSciPerson (2021); accessed June 15th 2024.

28 A correlation between masking and anxiety as well as depression is well-studied. See Cage and Troxell-Whitman (2019) a.o.

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10

RE-EXAMINING KNOWLEDGE

Sensory and Social Challenges in the Autistic Community

Ira Kraemer and Eric Kraemer

10.1 Introduction

Most philosophers and other researchers standardly assume that ideally rational neurotypical humans are the correct standard for determining how minds should work, how knowledge should be obtained, and how social interactions should transpire. However, this assumption is no longer current with research indicating that not all humans are neurotypical thinkers and that not all knowledge is obtained in the same way. It is time to begin shifting our focus to include neurodivergent human thinkers when theorizing about minded social knowers.

The present chapter examines this contention by considering the case of autistic people, a growing neurodivergent group of thinkers, and considers how the dominant understanding of the nature and acquisition of knowledge needs to be expanded and revised based on current findings about autism. This broadened understanding also has important social and ethical consequences for both neurotypical (non-autistic) and neurodivergent (autistic) people that may have implications for revising current screening procedures and therapy approaches, reimagining educational training opportunities for autistic people and their therapists, and revising workplace practices and other social accommodations for members of the autistic community. This chapter will specifically focus on the sensory and social challenges that autistic people face, how they acquire knowledge, and how knowledge acquisition may differ from non-autistic people.

Knowledge involves the formation of true beliefs, and it is typically acquired from a variety of sources. These include direct sensory experience, learning from information provided by others (testimony), and reasoning from experiences and beliefs one has already acquired.[1] The philosophical study of knowledge is called epistemology. Epistemologists seek to answer such questions as, "what counts as valid knowledge?" and "how do we know what we know?". In this chapter we will specifically seek to answer questions such as these for autistic thinkers. We do not attempt to argue for any particular philosophical theory over others. Our current and more modest goal is to indicate how thinking about

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these matters needs to be enriched by responding to the various issues we raise. We will then conclude by suggesting how we might improve conditions for knowledge acquisition for autistic people in a neurotypical-dominant society.

10.2 Sensory Differences Are Real

Among the most important sources of knowledge is sensory experience. Because it has been established that autistic people have brains that process sensory information very differently from the brains of most non-autistic people (Danesh et al. 2015), we begin by first explaining the different types of sensory sensitivities in autistic people and highlighting sensory processing differences between autistic and neurotypical people.[2] We will then expand our focus in greater detail specifically on auditory sensitivity as a singular example to demonstrate how important it is to believe autistic people when they report their sensory experiences.

The true nature of autistic people's experiences is rarely acknowledged by neurotypical people. This causes autistic people to doubt and question their own ability to trust that their sensory experiences are real, denying them from being able to rely on one of the most important sources for obtaining knowledge, namely their own senses. Negating autistic sensory experience through gaslighting is one of the most common causes for extreme distress and pain in autistic people. We will then further discuss how this can even lead to a very common but misguided autism "therapy" known as Applied Behavior Analysis (ABA), which has often been described by autistic adult online communities as sensory torture and abuse in autistic people through extreme sensory exposure. Neurotypical people need to have the foundational belief that autistic people's sensory pain and distress are real experiences. This fundamental truth can result in relieving autistic people's sensory distress and sensory pain in a neurotypical dominant society.

10.2.1 Sensory Sensitivities

Autistic people commonly have a variety of sensory sensitivities, but how many and which ones depend on the individual. Each type of sensory sensitivity has its own consequences and triggers for sensory overload. Identifying these sensitivities in children and newly diagnosed adults can take not only time but special awareness by family, friends, and help from professionals. Even well-intentioned neurotypical people with an understanding of autism struggle to relate to the sensory sensitivities their autistic loved ones, friends, or colleagues experience. It is often not until an autistic person experiences sensory overload with its accompanying behaviors, usually meltdowns or a great sense of being overwhelmed, that the consequence of the sensitivity becomes more obvious to neurotypical people. It is important for the autistic person to identify their sensory sensitivities as early as possible following diagnosis to receive support and appropriate accommodations. This table identifies common consequences of sensory sensitivities and sensory overloads.

Auditory Sensitivity	*Olfactory Sensitivity*	*Light Sensitivity*	*Touch Sensitivity*	*Temperature Sensitivity*
Ear pain Migraines Hearing Too Much (inability to filter out background sounds) Processing Another's Talking Is Painful, Overwhelming, Difficult Quiet Sounds Experienced As Very Loud	Nausea Gagging Migraines	Watery Eyes Eye Pain Migraines	Skin pain Startled by Touch Unpleasant Shivering	Skin Pain Nausea Migraines
Consequences of Sensory Overload				
Inability/Difficulty Thinking				
Shutting Down/Meltdown				
Inability to Speak				
Eye Contact Uncomfortable/Stressful				
"Brain on Fire" Sensation				
The Overload of One Sense Can Overload Other Senses				

10.2.1.1 Temperature Sensitivity

Autistic people can have difficulty regulating their core body temperature and may be hypersensitive to cold or hot weather. Accommodations for this sensitivity include: respect and tolerance of others who dress in what might be perceived as "inappropriate" for the season; being sensitive to fabric intolerances and avoiding them when possible.

10.2.1.2 Smell Sensitivity

Fewer studies have been conducted on smell sensitivity in autistic people than other sense areas. In one of the first controlled studies on olfactory detection, Ashwin et al. (2014) found that autistic people's sensitivity to detection of smell was significantly increased compared to neurotypical people, and that increased olfactory sensitivity is correlated with a higher number of autistic traits. Accommodations include: avoiding fragrant personal hygiene products, being aware of possible environmental smells that may cause discomfort, such as newly mown grass, flowers, and certain foods.

10.2.1.3 Light Sensitivity

Autistic children noticed faster movements in a visual task compared to neurotypical children (Foss-Feig et al. 2013), and autistic children may have a higher visual signal in their peripheral vision compared to neurotypical children (Frey et al. 2013). For many autistic people, eye contact can feel painful, overwhelming (like staring into the sun), or generally threatening. This correlates with higher amygdala response in autistic people during eye contact compared to neurotypicals (Tottenham et al. 2014). Accommodations include: wearing sunglasses in bright light, hats with visors, maximizing natural light indoors rather than overhead fluorescent or incandescent lighting, removing fluorescent lights as they are known to cause a high-pitched buzzing only perceived by autistic people, not forcing them to make eye contact.

10.2.1.4 Touch Sensitivity

Touch can also be hypersensitive in autistic children. In one study, autistic children had greater somatosensory cortex activity than neurotypical children with the same brush of the palm (Kaiser, Yang, and Voos 2016). Certain textures and fit of fabric in clothing can sometimes be perceived as irritating and even painful. Clothing tags are a common irritant in autistic people of all ages. Touch sensitivity can also overlap with other senses, like the texture of food, and food sensitivities can make it difficult to obtain nutrients and a proper caloric intake for some autistic people. Accommodations include: acceptance by neurotypicals of fabric intolerances, removing tags and labels in clothing, asking permission before making physical contact, such as hugs, finding agreeable yet nutritious food types.

10.2.1.5 Auditory Sensitivity

Auditory sensitivity is the most commonly reported sensory sensitivity that affects autistic people's lives (Howe and Stagg 2016). Two areas of auditory sensitivity that negatively impact communication for autistic people in educational, social, and environmental settings are hyperacusis and auditory filtering. These studies are good examples of the sensory processing differences in audition between autistic and non-autistic people.

10.2.1.6 Hyperacusis

In the autistic population, hyperacusis, which is a type of auditory sensitivity that is defined as physical pain or discomfort from loud sounds, was prevalent in 69% of autistic people, with similar percentages across all age groups, ranging from 4–42 years old (Danesh et al. 2015). A more recent review found that 50–70% of autistic people show decreased sound tolerance during their lifetime (Wilkenfeld and McCarthy 2020; Williams et al. 2021). Secondly, hyperacusis in autism is understudied (Danesh et al. 2015; Howe and Stagg 2016; Wilson et al. 2017) even though we know hyperacusis significantly increases anxiety, distress, and avoidance in neurotypical adults (Blaesing and Kroener-Herwig 2012), although less frequently in the neurotypical population. Hyperacusis may similarly cause anxiety, distress, and avoidance behaviors in autistic people.

10.2.1.7 Reduced Auditory Filtering

Another way that autistic people often process stimuli in different ways from neurotypicals is in their auditory filtering ability. Many autistic people hear more auditory streams than neurotypical people. For example, in an auditory task with multiple voices and a target voice, most autistic adults performed the task accurately, but also noticed that there was a voice saying "I'm a gorilla" in the background during the entire task. However, most neurotypical adults either did not notice or were able to ignore the voice saying "I'm a gorilla" during the task (Remington and Fairnie 2017). This inability to ignore unimportant sounds or conversations in a listening environment makes it difficult for autistic people with auditory filtering problems to direct their sole attention to a desired conversation or sound. This suggests that many autistic people hear all auditory sounds equally, including other conversations and environmental noise, and that irrelevant stimuli during a task may be much more distracting to an autistic person compared to a neurotypical (Remington and Fairnie 2017).

Accommodations for auditory sensitivity include: use of noise-cancelling headphones, avoiding noisy and moderate-to-loud environments, providing quiet spaces to decrease sensory processing overload.

10.2.2 Autistic People's Experiences with Sensory Sensitivities

Autistic people spend nearly their entire lives in a sensory environment that is too overstimulating, painful, and distressing. There is often little refuge from sensory bombardment, and much of that is because of the lack of knowledge and awareness by non-autistic people. Autistic people are expected to be able to function in both public and home spaces, no matter how chaotic, loud, busy, or bright. The intensity of sounds and noises in cities are hardly friendly to autistic people with sensory sensitivities. Buses have a peak noise of 114 dBA, levels that can cause hearing loss (Yao, Ma, and Cushing 2017), and hand dryers in public bathrooms can have sound levels above 100 dBA (Keegan 2020). Daily sounds in the home that are also painful for autistic people with hyperacusis include a vacuum cleaner, hairdryer, the flushing of a toilet, and other broadband noises (Wilson et al. 2017).

To put things in perspective, light and sound bombardment are often used as torture techniques outlawed by the United Nations and the European Court of Human Rights (Davies 2009). Imagine a parent asking an autistic 4-year-old child to spend all day at school in a class with a large group of loud excited children or go to a grocery store with buzzing fluorescent lights that are not heard by the parent but are piercingly painful only to the child, along with loud shopping carts, and varying temperature changes. Similar sensory experiences occur every day to autistic adults who must routinely work in a noisy open office setting, tolerate high- or low-pitched office equipment noise not perceived by neurotypical colleagues, such as water coolers, or be expected to attend an office social event or risk losing their job. Neurotypical people may not fathom that any of these spaces could be considered akin to sensory torture for autistic people (Milton, Heasman, and Sheppard 2018).

When neurotypical people have reflexive visceral reactions from experiencing sudden, extreme sensory stimuli, and grab their ears, yell, or run from the sound, these reactions are considered acceptable behavior because it is understood by other neurotypical people who are experiencing the same sensory experience. However, when autistic people have any of these reactions in a room full of neurotypical people, in what seems to neurotypical people

as a "normal sensory environment", the autistic person's behavior appears irrational. This is because neurotypicals are unable to have the same sensory experience as autistic people and are therefore unable to understand that autistic people are only having a "normal" reaction to what *they* are feeling.

The behaviors and reactions by autistic people are constantly being measured by the standards of neurotypical society. It is all too common for neurotypical people to assume that it is the autistic person's *behavior* that is the problem, rather than the autistic person's sensory experience that is causing their distress. This in turn leads parents, doctors, and educators, who cannot embody the autistic person's sensory experience, to make erroneous assumptions about the reasons for many "odd" behaviors observed in autistic children.

This misunderstood behavioral focus has become the basis of what has been the source of years of an unethical and ineffective "treatment" for autism called Applied Behavior Analysis (ABA).[3] This "gold standard treatment" approach has been the most widely accepted recommendation made by most physicians and educators for worried parents in the United States, and in most states, this is the only "therapy" covered by insurance. Most disturbingly, ABA "therapy" has proven to be neither effective nor ethical.[4] ABA therapy often attempts to "extinguish" autistic people's behaviors by consistently exposing an autistic child to sensory pain, such as a loud sound, to train them to suppress their *reaction* to that stimulus.

For example, researchers in an ABA case study considered a 6-year-old autistic child who covered his ears to a loud sound to be exhibiting a "problem behavior" (Devlin et al. 2008); but training the child to stop covering his ears to the sound does not address the real problem which is the autistic child's internal experience of sensory pain. This type of "treatment" approach is particularly problematic for sensory sensitivities as neurotypical ABA therapists who are administering the therapy are not having the same sensory experience the child is having even in the same environment shared during the "therapy" sessions. How can therapy objectives be met for sensitivities when the sensitivities are only perceived by autistic children and not also by the therapist?[5] If a neurotypical person or therapist cannot experience the sensory environment that an autistic person experiences, then their natural conclusion is that the autistic person is *irrational* or in a child, a *behavioral problem*. This is why ABA therapy, currently in use today, is often harmful to autistic people. In addition, as explained earlier, studies show that autistic people with sensory sensitivities do not habituate to sensory stimuli making this an ineffective and harmful treatment.

For autistic children with hypersensitivities, ABA therapy is actively teaching them to suppress pain and pretend to appear to be fine when they are under duress. Suppressing the "undesired" behavior is often the only way for the autistic person to stop the painful stimuli that they are experiencing during ABA therapy. This often forces the autistic person to "mask". Pearson and Rose (2021) define autistic masking as the "suppression of natural autistic responses and adoption of alternatives across a range of domains".

Many non-autistic people similarly feel that ABA is particularly effective for minimally speaking autistic individuals who engage in self-injurious behaviors. Shkedy et al. (2019) argue that Applied Behavior Analysis does not take the thoughts, feelings, and other internal processes of the individual into account, and therefore ABA is unscientific in its approach to self-injurious behaviors. They have found that the reason autistic people perform self-injurious behaviors are often for the same reason as neurotypical people (2019). Therefore, just as minimally speaking neurotypical people would be treated, autistic people should be

treated by establishing a functional communication system, helping the individual to identify any pain they are experiencing, or performing other standardized assessments (2019).

In this section we have discussed the many challenges, both sensory and social, that autistic people face. To put our understanding to good use we now turn to the theory of knowledge. How can we meaningfully apply leading theories in the theory of knowledge to the "lived experience" of autistic people?

10.3 Epistemological Theory and Autism

We now turn to considering leading theories of knowledge in light of autism. Early epistemologists tended to ignore autistic people, regarding them to be people who lacked knowledge either because they were insane, intellectually limited, or possessed by devils. We take it to be obvious that such views are wrong, that probably the same percentage of autistic people possess significant amounts of knowledge as non-autistic people, and that some autistic people have been and continue to be significant sources of knowledge for the population as a whole.[6] Based on the autistic challenges we have just reviewed, we want now to explore how certain traditional epistemological theories need to be re-examined based on recent research about neurodivergent people.

Although epistemologists discuss a wide variety of topics, our discussion here will be limited. The three epistemological questions that we shall now be considering are:

1 What are different kinds of knowledge?
2 What are the leading accounts of propositional knowledge
3 Do autistic people differ from non-autistic (neurotypical) people in the way they obtain knowledge?

Philosophers have standardly divided types of knowledge into three kinds:

1 Knowledge by Acquaintance, that is, something one knows by directly experiencing it, such as "I know what the color green looks like",
2 Competence Knowledge, or knowing how to do things, such as "I know how to tie my shoes", and
3 Propositional Knowledge, which involves knowing things that are true, such as "The first person landed on the moon in 1969".

Obviously autistic people possess all three kinds of knowledge. However, it can be argued that sensory sensitivities in autistic people do impact the degree and frequency of how that knowledge is acquired.

10.3.1 Knowledge by Acquaintance

Knowledge by Acquaintance involves knowledge that one has from direct experience of such things as colors, sounds, shapes, tastes, textures, smells, pains, and pleasures. It cannot be communicated through language or certain ways of acting. It can only be obtained from first-hand experience. It also includes being able to recognize specific objects by becoming directly acquainted with them, such as Mt. Fuji, a mountain with distinguishing marks, size,

and shape, or recognizing that something is not only music, but specifically the beginning of Beethoven's 5th Symphony.[7] There is little disagreement among philosophers about this type of knowledge acquisition in neurotypical thinkers.[8] But, because it is acquired primarily through sensory information obtained first-hand and since autistic people have a significantly higher prevalence of sensory sensitivities than neurotypical people, Knowledge by Acquaintance deserves closer examination, particularly with respect to perception of pain. To fully examine this, we must first start with an examination of sensory gaslighting and alexithymia.

Sensory gaslighting is the act of one person's diminishing another person's perception and knowledge of that other person's sensory experience.[9] Neurotypical people's disbelief of an autistic person's sensory experience creates a disconnection between the autistic person's inner sensory world and the behavior expected of them in nearly every aspect of their life. Acquiring and forming true beliefs of pain first-hand through Knowledge by Acquaintance is essential for the health and safety of autistic people, especially for those who also have alexithymia. Alexithymia, which some research suggests may be genetic in autistic people (Bird and Cook 2013), is the difficulty recognizing, labeling, or explaining one's emotions. Alexithymia only compounds the impact that sensory gaslighting has on autistic people by causing them to ignore or question their own basic feelings and needs to an even greater degree. Living in a neurotypical-dominant society, autistic people often learn not to trust their own sensory and bodily signals, as they do not receive validation of their real internal feelings and pain responses from people around them, even when communicating them explicitly to neurotypicals.

Neurotypical parents often wonder why their autistic child is "so angry" or "upset all the time" and many times the answer is rooted in their child simply being in pain from an overwhelming sensory environment. Take the following example: an autistic child is told by their parents for years that "it's not that loud" every time the dishwasher was emptied, but to the child, the noise caused so much pain it felt like their ear was being stabbed with an ice pick. Autistic people grow up being "taught" that these intensely painful sensory pains are *minor, insignificant, nothing*, sometimes over their entire lifetimes. It is no surprise then that there are high rates of trauma, posttraumatic stress, and dissociation in autistic adults (Reuben, Stanzione, and Singleton 2021; Reuben and Parish 2022).

In a systemic review, 34.2% of autistic people without intellectual disability experienced suicidal ideation, compared to 9% in the general population. Suicide plans (21.9%) and suicide attempts (24.3%) were also much higher than the general population, at 2% and 3% respectively (Newell, Phillips, and Jones 2023). While there are long-term mental health effects from suppressing pain, little research has been conducted on the physical consequences of long-term suppression of pain.

Based on the many experiences of autistic people, it seems reasonable to claim that most autistic people live in a state of chronic pain solely from everyday sensory experiences. Suppressing sensory pain over decades can result in autistic people and/or those around them ignoring or minimizing actual physical health problems. This in turn can cause autistic people to delay seeking medical care because they have been taught for so long to ignore their pain, having been gaslighted that it was not real. Autistic adults self-report receiving lower quality healthcare compared to non-autistic adults across 50 out of 51 items surveyed and are more likely to have chronic health conditions (Weir, Allison, and Baron-Cohen 2022).

In addition, research suggests that autistic people do not use body language and facial expressions to indicate pain like neurotypical people do. Because they get signals from others

that their natural facial expressions/flinches/startles are "not correct", they learn to quell these pain reflexes which causes further confusion and doubt especially when needing medical treatment. Tordjman et al. (2009) found that autistic children, who had a significantly higher heart rate during a blood draw than neurotypical children suggesting higher stress levels, actually showed *fewer* facial expressions during the blood draw. Autistic people's pain responses continue to go unrecognized or, at best, be underestimated by neurotypical adults.

Autistic people respond differently from neurotypical people to pain. Many autistic people also find it difficult to distinguish sensory pain from physical pain (Kraemer 2021). One example is an autistic person who confused actual physical pain with their sensory sensitivity to clothing not realizing that a surgical bandage placed too tightly after a medical procedure was actually causing it to cut into their skin. Autistic people may also respond differently from neurotypical people to physical injury or illness due to sensory gaslighting of their chronic pain. These physical health problems in autistic people due to sensory gaslighting have mostly gone unaddressed by the medical community in recent years. Other autistic people have suffered in pain unnecessarily for years from broken bones because they were either not believed by their family or doctors at the time of the injury or they did not know their bones had been broken until years later after learning through an unrelated imaging procedure at a doctor's office.

The impact of gaslighting by medical professionals and having alexithymia, difficulty distinguishing sensory pain from physical pain, can also cause serious, sometimes fatal, consequences for autistic people. They will often seek medical care much later than neurotypical patients resulting in later-stage cancer diagnoses and more aggressive medical treatment with poorer outcomes. Maternity care can also be affected, as several pregnant autistic people who were in labor were not believed by doctors to be in labor, and so were not given proper pain relief (Grant 2023). Physicians and medical staff often disregard autistic patients' medical concerns and needs because of a lack of understanding of autistic sensory and pain experiences. Unfortunately, this is a widespread concern within the autistic community, as they continue to go undiagnosed or misdiagnosed by the neurotypical medical community.

Knowledge by Acquaintance in neurodivergent populations differs from neurotypical populations when sensory gaslighting remains prevalent. Public affirmation and recognition of sensory sensitivities in autistic people in a neurotypical-dominant society will not only begin to help autistic people acquire true beliefs though Knowledge by Acquaintance but it may positively affect the overall healthcare outcomes in autistic people.

10.3.2 Competence Knowledge

Competence knowledge involves the kind of "know-how" that humans have that enables them to do a wide variety of things through doing. For example, reading about how to ride a bike or watching someone else ride a bicycle is not the same knowledge gained as actually riding a bicycle. Competence Knowledge is acquired through experiential learning, and while autistic people will acquire knowledge through this avenue, the opportunities for acquiring knowledge this way may occur less frequently because of their sensory sensitivities than for neurotypical people. For example, being pressured by a parent to learn how to ride a bicycle on a hot, sunny day may cause a child to act out, not because of the task but because of the child's light and/or temperature sensitivities unrecognized by them all, leaving

the parent confused and frustrated. In reality, though, it is the child's sensory perception of the harsh outdoor environment that may be too overstimulating, painful, or overwhelming that prevents this teaching moment from happening. Without understanding sensory sensitivities first and then, providing adequate accommodations and support, it may be difficult for autistic people to acquire knowledge and form belief through Competence Knowledge.[10]

10.3.3 Propositional Knowledge

Propositional Knowledge is knowledge *that* something is the case, such as knowing that today is Monday or that 7 + 5 = 12, or that something is *not* the case, such as knowing that today is not Tuesday or that 7 + 5 is not equal to 13. It can be acquired through experience, testimony (hearing or reading about it) or by reasoning and is typically expressed by using declarative sentences. Propositions are things that might be true or false. In contrast to Knowledge by Acquaintance or Knowledge by Competence, Propositional knowledge can be conveyed, taught, or communicated without first-hand knowledge or training.

Ever since Plato, philosophers have agreed that propositional knowledge involves believing a proposition that is true. If one believes something that is false, such as the common old belief that the Earth is flat, that belief, no matter how popular, is just not knowledge. Further, one's belief should be justified or adequately supported by one's experience, evidence, and/or reasoning.[11] But, there remain significant disagreements as to how justification or support for one's belief is to be obtained.

10.4 Theories of Propositional Knowledge and Autism

Let us now turn our focus to the leading theories of propositional knowledge and discuss how autistic knowers differ from neurotypical knowers with respect to these different theories.

They include Foundationalism, Coherentism, Reliabilism, Virtue Epistemology, Social Epistemology, and Standpoint Epistemology.[12]

10.4.1 Foundationalism

We begin with Foundationalism, the view that our propositional knowledge is built on foundations of special beliefs (called "foundational beliefs") which are justified by their very nature, and which serve to provide the justification for all of the other things that we know ("non-foundational beliefs"). For example, my non-foundational belief that there are lots of flowering dandelions in the neighbor's yard is built on the foundational belief of the yellow flower-shaped perception that I am now having. The basic goal behind the foundationalist approach to propositional knowledge is to provide firm, certain foundations for all knowledge. Basic, foundational beliefs are certain; their epistemic security is then transmitted to non-basic beliefs by means of secure principles of reasoning. Non-basic beliefs are not certain, but they can be trusted because they are based on basic beliefs that are certain.[13]

Many autistic people may initially be attracted to the view because it promises certainty. And, given the prevalence of sensory hypersensitivity in the autistic population, perceptual beliefs resulting from these sensitivity experiences seem to provide a solid foundation of knowledge on which autistic people can rely. What is less promising for autistic people

is being sure about what principles of reasoning to use to go from sensory beliefs to non-sensory beliefs. Such rules are not explicitly taught and must also be arrived at through individual experiences. This usually involves autistic people trying to figure out how neurotypical people reason, which can be an exceedingly difficult task. Although autistic people value certainty, they often do not feel certain because of their different (autistic) sensory processes and the difficulty they find in being sure that their sensory experiences are taken seriously by non-autistic people. This lack of certainty may make autistic people question their own senses and rely less on their own foundational beliefs, as autistic people may choose to operate on what they think the beliefs and sensory experiences of neurotypical people are, rather than rely on their own mental states.

Some of the experiences of autistic people discussed above also raise the issue of whether there are, in fact, very different foundational beliefs across neurodiverse populations, as well as very different connecting principles. And, if this is the case, then it would seem to raise serious concerns about how the simple model of sensory foundations and reason-connected layers which we inherited from Aristotle and Descartes can be universally applied across the whole of the human population.

10.4.2 Coherentism

Coherentism, the traditional rival of foundationalism, is an account of propositional knowledge that takes the coherence of the great many different beliefs that one has as the mark of knowledge. If a particular belief coheres, or "fits well" with the other beliefs that someone has, then, if true, the belief counts as knowledge. The initial attractiveness of this account should be obvious. Experience teaches us to expect sets of beliefs that fit together. If one sees what appears to be a rose, and has a fragrance of rose, and touches the thorn of the same rose and hears a bee buzzing around this apparent rose, then the belief that there is a rose that one is experiencing fits well with the set of one's other sensory beliefs.[14] Thus, it is common to think of the coherentist account of knowledge as a holistic account. But, as with other appeals to holism, Coherentism has been criticized for a lack of specificity as to exactly what constitutes a holistic fit, and whether a set of beliefs are sufficiently grounded to match up with the way things really are. Coherentists agree that a minimal requirement is that no belief that one holds contradicts other beliefs. But, clearly more is required. And what is not clear is whether there is simply an intuitive feel of fitting together that is guiding those who adhere to coherentism. But the intuitive feel of coherence will either be different or absent depending on the situation in which the believing person finds themselves. Autistic knowers are likely to react differently with respect to discussions of particular beliefs, depending on whether the autistic knowers are discoursing with other autistic knowers or with neurotypicals.[15]

Autistic people and neurotypical people do not have the same body language, tone of voice, or facial expressions, which can make communication between these two groups challenging. However, this does not mean autistic body language or tone of voice is "wrong". This is an important distinction, as communication within neurotypes works rather well. For example, a pair of autistic people communicate equally as well as a pair of neurotypical people do, but when an autistic and neurotypical person converse, less information is shared because of the differences in communication between autistic and neurotypical people (Crompton et al. 2020).

Neurotypical people naturally respond to others by subconsciously reading social cues, such as facial expressions and body language. However, autistic knowers may not extract meaning from these same kinds of social cues or even be aware of them, but instead, have their own set of autistic social cues that are not understood or respected by neurotypical people. It is not the case that autistic people do not have social communication skills. The explanation, rather, is that autistic social communication is a fundamentally different way of communicating from neurotypical social communication.

If autistic people were a majority in society, it is likely that the neurotypical way of communicating would be stigmatized or deemed incorrect in virtue of being in the minority. So, the further question of whether autistic knowers have enough, appropriately connected beliefs to achieve coherence on a regular basis is raised. Difficulties that autistic knowers experience when communicating or interacting with neurotypicals will often make achieving a sense of coherence much harder. While experiencing a coherence of beliefs may be a regular occurrence for neurotypical people, for autistic people, on the other hand, being in a situation of incoherence, that is, of not understanding how various experiences and beliefs are supposed to fit together, may be more common. And in this case, it is rather incoherence that serves as a negative criterion, to create not certainty, but rather uncertainty, especially regarding one's own social experiences, behavioral reactions, and sensory experiences.

10.4.3 Reliabilism

A third, and more recent theory of the nature of the process that turns true belief into propositional knowledge is Reliabilism, the prominent version of Externalism. In contrast to Internalism, the view that knowledge depends solely on features internal to the believer's mind (which defenders of Foundationalism and Coherentism both accept), Externalism says for a belief to be justified it must rely also on some factor external to the believer's mind. The guiding metaphor for the reliabilist is that knowledge is true belief that is reliably brought about or sustained by considering the source of a belief. Beliefs can be formed from many different sources, such as sense experience, reason, testimony, memory. Various explanations of what makes a belief reliable have been suggested. Fred Dretske (1981) speaks of a belief being appropriately caused by information. Goldman and Beddor (2021) propose that beliefs that result from a reliable cognitive belief-forming process (or set of processes) are justified. And, Robert Nozick (1981) proposes that a justified belief must "track truth", in the sense that the person would believe the particular belief if it were true and not believe it if it were false.

All of these three versions do not make any specific claim about how reliable knowledge is produced, leaving it open whether human primates evolved as knowers in virtue of being able to form reliable beliefs or whether they were created as knowers with this power. Another theorist, Alvin Plantinga (2000), proposes a very different and explicitly theistic account of reliable knowledge. According to Plantinga, God created humans according to a Design Plan, which specifies how the various parts of human beings are supposed to function properly. For Plantinga, people have knowledge when their beliefs are formed according to the specific design plan that God put in place when God created humans.

For autistic knowers, the reliabilist account of knowledge presents interesting advantages.[16] One advantage concerns beliefs for which one very often cannot produce justifying reasons or demonstrate coherence with other beliefs. Rather beliefs can be formed based on one's own cognitive process from both internal and external sources deemed reliable.

Whether or not a belief is justified depends upon whether that cognitive process is a reliable source for a particular person of true beliefs. For example, using vision to determine the color of an object which is well-lit and relatively near is a reliable belief-forming process for someone with normal vision, but not for a color-blind person.

Autistic people with sensory sensitivities have remarkably reliable perceptual belief-forming abilities because knowledge can be acquired not only through their own perceived sensory experience, but also through their own reason, and testimony from external sources. For example, autistic people with auditory sensitivity will perceive sounds as being loud and painful more frequently than neurotypical people and, in some cases, hear sounds that go completely undetected by others, such as buzzing of fluorescent light. Even though they get little to no validation with respect to their special sensory experiences from neurotypical people in those situations, reliabilism allows autistic people with sensory sensitivities to acquire knowledge and form beliefs from their own reliable perceptions. Because of the intensity and frequency of these sensory experiences, autistic knowers may form true beliefs about perceptual stimuli more often than neurotypical people. Presumably, for such people it is reasonable to suppose that there are specific neurological processes at work that produce these true beliefs. There are also cognitive situations in which autistic people do not process information or form beliefs regarding certain environmental stimuli that neurotypical people do, because their sensory sensitivities may prevent them from being able to, such as difficulty with auditory filtering or reading emotions. So, in such cases autistic people must employ alternative processes and mechanisms to gain comparable information.

But reliabilism also raises questions of its own. What evolutionary role do autistic people play in human society?[17] If we assume, as seems reasonable, that autistic people have existed ever since *homo sapiens* emerged, then what function might autistic group members be fulfilling that neurotypical members of a primate group cannot? That these different ways of mental operation should have co-existed for such a long time suggests that there must be an answer. On the other hand, if we follow Plantinga's theistic version of reliabilism, then other questions need to be raised. The evidence suggests that there must be different design plans for getting knowledge in the human population. It seems reasonable to ask Plantinga and his followers why God would have designed some human beings to obtain knowledge one way, such as the way that neurotypical people acquire knowledge, and other human beings, such as autistic people, were designed to procure knowledge another way?[18] This is especially hard to understand, given that these two different systems of knowledge acquisition make communication between the two communities problematic.

10.4.4 Virtue Epistemology

A fourth attempt to account for which true beliefs count as knowledge is known as Virtue Epistemology. This approach has elements in common with the various versions of reliabilism. The basic idea behind virtue epistemology is that the exercising of certain virtues in the acquisition of beliefs establishes knowledge. But what are epistemic virtues? It turns out that there are two very different ways of conceiving virtue as related to knowledge: the character trait version and the intellectual capacity version.

The character trait version of Virtue Epistemology reaches back to Aristotle's discussion of moral virtue in his *Nichomachean Ethics*. James Montmarquet (1993) conceives of the relevant virtues as personality traits (or qualities of character) that are similar to moral

virtues such as intellectual courage or intellectual carefulness (prudence). Linda Zagzebski (1996) adds that an intellectual virtue also motivates someone to be reliably successful. Thus, for Zagzebski, Intellectual courage is a virtue according to which a person is motivated to persevere in their own ideas and is reliably successful in doing so. For both Montmarquet and Zagzebski, a person has knowledge of a particular proposition just in case the person's true belief arises out of an act of intellectual virtue. So if someone acts with intellectual courage and intellectual prudence in evaluating a particular situation and forms true beliefs using these character traits, then such a person will have knowledge of those beliefs.

Here again, the autistic believer is both encouraged and discouraged. As our discussion of epistemic challenges has shown, because of the many difficulties that they face, autistic believers have to exercise considerable courage regularly in order to overcome great confusion, sensory sensitivity, and lack of neurotypical social cue comprehension to determine what belief actually best lines up with their current and past experiences. Autistic believers are also accustomed to exercising great prudence in figuring out what to believe, having been "burned" many times in the past trying to interpret difficult situations in which they found themselves. So autistic knowers are no strangers to epistemic virtues conceived as character traits. But autistic believers will also report that in many situations even a prodigious exercise of intellectual courage and intellectual prudence will not be sufficient to arrive at a true belief. So at most the exercise of intellectual virtues in many cases for autistic people will be a necessary but all too often insufficient condition for obtaining knowledge. Again, it should be noted that when autistic people are working in autistic-dominant environments, their rates of success at interpretation with other autistic people will be much higher than similar exchanges with neurotypical people (Crompton et al. 2020).

The second version of epistemic virtue theory, the intellectual capacity version, has been advanced by Ernest Sosa (Sosa 2007, 2009).[19] For Sosa, an intellectual virtue is a cognitive power or ability that is reliable. Examples of the kind of intellectual powers that Sosa employs are perception, memory, introspection, and reason. For Sosa and his followers, a belief is justified for a person just in case it is produced by an intellectual virtue. For Sosa, there are also two different kinds of knowledge, "animal" (or non-reflective) knowledge, and reflective knowledge. So-called animal knowledge is what we know without having to reflect on our beliefs. Reflective knowledge refers, of course, to those beliefs that we need first to reflect on before we can determine what we think. These two different kinds of knowledge will, to be sure, require very different intellectual powers.[20] And, yet again, autistic knowers and neurotypical knowers will differ. The reflective/non-reflective beliefs of neurotypical knowers will mostly fit into commonly recognized categories. But the reflective/non-reflective beliefs of autistic knowers will most likely encompass a different range of items and in different proportions from neurotypicals, because of neurotypical people commonly disbelieve the sensory perception and social interpretation of autistic people. This all too typical disbelief by neurotypical people can create more reflective thinking about the self, social dynamics, and sensory perception which in turn can also bring about more anxiety and stress for autistic knowers. It is important to note that what counts as a non-reflective belief for one kind of knower may turn out to be a reflective belief for another kind of knower, and vice-versa. Given that there are many differences in cognitive powers across the spectra of neurotypical, autistic, and other neurodivergent people, and vast variability in thinking and sensory perception within the autistic population, it seems best to interpret Sosa's virtuous-powers approach in an individual specific, open-ended way.[21]

The philosophical views which we have considered so far, all fall within the category of individualist epistemology, what it is for an individual person to be a knower. We will now explore the social stigma challenges autistic people with sensory sensitivities face when interacting with neurotypical people in social settings and then proceed to explore epistemological theories with other social considerations.

10.5 Social Stigma

In addition to often being told to exist in a state of sensory pain, autistic adults experience ostracism from neurotypical peers, often without the neurotypical peers' knowledge (Sasson et al. 2017; Sasson and Morrison 2019). In one study in which neurotypical people watched videos of either a neurotypical person or autistic person, where no disclosure was given, neurotypical people were significantly less likely to want to sit next to, hangout with, or talk to the autistic person compared to the neurotypical person (Sasson et al. 2017). Neurotypical people also rated the autistic person as less likeable, less attractive, and less dominant than neurotypical people. The only characteristics that were not significantly more negative were being smart, trustworthy, and living near the person.

In another part of the study, the researchers had neurotypical people watch separate one-person interviews of autistic and neurotypical people using different modalities: speech content only, a standard video with audio, audio-only, a silent video, or a static frame. Neurotypical people rated autistic people in the interviews as significantly more negative than the neurotypical videos for every single modality, except for speech content. A further study found that if neurotypical people had a higher stigma toward autism and knew that the person in the video was autistic, the neurotypical person rated autistic adults more negatively (Morrison et al. 2019).

Autistic people are often not the ones creating these negative impressions. Rather the negative impressions are produced from neurotypical people's lack of understanding of autism and their own biases. Despite being told that "if you just put yourself out there and talk to people, you can make friends", autistic people often find themselves at disadvantage socially when interacting with neurotypical people who subconsciously perceive negative social cues based on autistic body language and tone of voice. The social stigma challenges that autistic adults encounter cause them to experience loneliness and low social support, once again adding more lifetime stressors than neurotypical peers, and negatively impacting mental health in autistic adults (Moseley et al. 2021).

10.5.1 Social Epistemology

There are two other theoretical aspects of epistemology to consider here, both of which relate to social considerations. Toward the end of the last century researchers began to ask serious questions about the requirements for social groups to have knowledge, giving rise to what has been called Social Epistemology. Key topics of investigation in this field include testimony, peer disagreement, group belief, and group justification.

What makes this particular field of epistemology of interest for consideration in this chapter is that, as has been demonstrated above, autistic knowers typically feel themselves often to be epistemically excluded from larger groups of neurotypical knowers. They sense that the testimony they offer is not taken seriously and that they are not accepted as peers by

neurotypicals. Therefore, when autistic knowers disagree with neurotypical knowers, the disagreement is not registered by neurotypicals and so autistic contributions to group belief and group justification are minimal or nonexistent. As a result, asking how neurodiversity can be attained during group belief acquisition and group justification is a challenge that provides a goal to be pursued even though it is a topic about which substantial theoretical insight is not available.

It is worth asking whether the differences between neurotypical knowers and autistic knowers are so substantial that one cannot expect the two different elements to be able to form a coherent epistemic unit, or whether, with appropriate training on both sides, the differences would be surmountable. It is important to note that currently, autistic people are expected to do all the cognitive work to assimilate into neurotypical-dominant society, which can create serious costs in autistic people's emotional, mental, and even physical health.[22]

10.5.2 Standpoint Epistemology

The last theoretical position we shall briefly mention is Standpoint Epistemology. This view was intended to be controversial when it was introduced and has remained so since. The basic idea of this approach, deriving allegedly from Karl Marx and Friedrich Engels and adopted by feminist epistemologists, is that those who lack political power are thereby in a better epistemic position to know what is true in given social situations (Harding 2003). We think that the scope of standpoint epistemology should be expanded to include autistic people as well.

Based on the struggles that autistic people face,[23] we suggest that traditional standpoint epistemology, which argues that women and people of color have greater social insight than their white male peers, needs to be revised so that it applies similarly to autistic people, albeit with a different type of social knowledge gained than their neurotypical peers that were initially the source of the view.[24] It should also be recognized that some autistic people are also members of marginalized groups, including people of color, women, LGBTQNIA+, and others. And it should be noted that many researchers often ignore the special experiences of marginalized groups when studying the autistic population.

10.6 Conclusion

In this chapter we have considered the relation of autism and knowledge from several angles. We have been concerned to provide knowledge of the many challenges, both sensory and social, that autistic people face with respect to attaining knowledge and being recognized as possessors of it. We have then considered how leading accounts of propositional knowledge must come to grips with these specific challenges and have suggested ways in which they might need to be modified accordingly. And, we have further proposed a positive outcome of our endeavor: namely, emphasizing how increasing knowledge in the general population about autism itself will help both neurotypical people and autistic people figure out and then implement more harmonious and productive ways to live alongside, learn from, and help each other.

The more everyone in our society understands that autistic people, and other disabled people, often feel pain through living daily in our sensory-filled world, the more likely we

will have increased well-being among autistic people, and the less likely that physical illnesses and physical pain will be overlooked in autistic bodies and minds. Educating the neurotypical population about differences in sensory processing and convincing neurotypical people that they simply do not experience what most autistic people experience will not only improve the quality of life for many, but will genuinely save lives, and help autistic people navigate their own sensory challenges. This will also allow autistic people to have language to describe their sensory experiences to others, but most importantly, to themselves.

To take seriously the obstacles that autistic people face is to pose a serious challenge to contemporary epistemology by suggesting that important neural variations make important differences in how knowledge is acquired, established, and retained. As a result, defenders of specific theories of epistemology need to consider how their own preferred view fares with respect to autistic knowers, and what modifications are required.

In addition to theoretical recognition and inclusion, autistic knowers also require social changes as well. We suggest that the accommodations that are needed to help autists to acquire knowledge are not more demanding than those required to enable neurotypical people with various recognized conditions such as blindness, deafness, and mobility limitations, which current social planners now recognize as important to incorporate into the public square.

No matter which philosophical view about acquiring knowledge one favors, we need to examine how to make it easier for autistic people to acquire knowledge, because as things now stand, there are all too often multiple barriers in their way. The public square currently is very unfriendly to autistic people. Here are four suggestions on how it might be improved. First, we need to become more educated about the extreme sensory challenges that autistic people face in the public square, particularly regarding sensory overload. Second, there needs to be more research on autistic sensory processing so professionals serving, treating, and advising autistic people and their families may give the most effective care in ways that best meet and accommodate their sensory needs and create sensory-friendly environments. Third, we need to solicit information directly from autistic adults, rather than from secondary sources who do not have the requisite experiences or ways of thinking. Fourth, it is important to create support groups among autistic people for a variety of powerful epistemic reasons. Support groups could enable autistic people to combat gaslighting, to validate sensory experiences that neurotypical people lack, to discuss common strategies for obtaining reliable beliefs, to demonstrate how to create coherent connections between beliefs, and to better establish reasoning principles that autistic people can count on. Implementing these suggestions will greatly help both autistic people and neurotypical people.

Acknowledgments

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Notes

1 Some have argued that certain items of knowledge are innate. We will not take a stand on this matter here.
2 While this chapter focuses on sensory hypersensitivities in autistic people, it is important to note that many autistic people also have sensory hyposensitivities, which means that they seek *more* sensory stimuli than a neurotypical person needs to regulate emotions. Some autistic people have

both hyposensitivity and hypersensitivity. Readers are cautioned not to make assumptions about autistic individuals based on the examples used in this chapter, as autistic people can have extremely different sensory processing differences from one another.

3 For examples, see The Department of Defense; Wilkenfeld and McCarthy (2020); Sandoval-Norton and Shkedy (2019) ; and Shkedy et al. (2019).

4 Again, see The Department of Defense (DOD) (2020); Wilkenfeld and McCarthy (2020); Sandoval-Norton and Shkedy (2019); and Shkedy et al. (2019).

5 Philosophers will be reminded of Bishop Berkeley's idealism.

6 See Silberman (2015) for a discussion of important figures in the sciences who were autistic.

7 As mentioned above, autistic people often have hypersensitivities and hyposensitivities, so the nature of their experience that undergirds Knowledge-by-Acquaintance will often be different from neurotypicals.

8 This is not to say that philosophers agree about the metaphysical nature of experience. Rather it is to say that the claim that humans have knowledge by means of experience is typically granted.

9 The term "gaslighting" derives from the 1938 play "Gas Light" by Patrick Hamilton, which George Cukor turned into a 1944 movie of the same name.

10 As mentioned above, autistic people often have hypersensitivities and hyposensitivities, so the nature of their experience that undergirds Knowledge-by-Acquaintance will often be different from neurotypicals.

11 For the purposes of this chapter we ignore worries raised by the Gettier Problem (Gettier 1963).

12 For an accessible and useful introduction to these topics, see Pojman (2000).

13 Foundationalism was famously enunciated in the modern period by Descartes and has more recently been defended by Chisholm (1982, 1989), Audi (2011), and Fumerton (2022).

14 Defenders of coherentism include Lehrer (1974), Bonjour (1985), and Olson (2022).

15 Note that if neurotypical people were a minority in society, and people with the autistic neurotype were the majority, who experienced incoherence and coherence would likely be reversed.

16 See Silberman's discussion of savants (2015) and compare to Armstrong's (1973) discussion of the chicken sexer.

17 See Spikins, Wright, and D. Hodgson (2016). Note that this is not a question that neurotypical people ask of themselves.

18 If one is a Theist, then one cannot allow that God would have made a mistake, so some explanation should be forthcoming.

19 See also John Greco (2010) and E. Kraemer (2011, 2015).

20 It is instructive to compare this distinction with Daniel Kahneman's distinction between System 1 beliefs and System 2 beliefs (Kahneman 2011).

21 It is not clear whether this interpretation is completely consistent with his most recent version of virtue epistemology which views reflective knowledge as a kind of achievement. See Sosa (2021).

22 Further research needs to be done to determine whether current theories in social epistemology hold for group interaction that is limited to autistic people.

23 In addition to the many challenges listed above, autistic people also have a low employment rate.

24 We are also concentrating on the idea that those who are weaker in some cognitive areas often have compensations in other cognitive areas that provide them with greater insight than typical knowers. For example, autistic observers may be better at detecting certain details than neurotypical observers.

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11

THE THING OF IT ISN'T

Defending Eliminativism About Autism

Simon Cushing

11.1 The Self-Diagnosis Debate

Autism first entered my consciousness to any serious degree when my second son was diagnosed, in 2005, when he was a toddler. At the time, and this remained more-or-less true right up to when we were putting together our first volume of papers on the philosophy of autism, there was hardly any discussion of self-diagnosis. Autistic people were, in general, largely seen as seriously impaired, often non-verbal, and certainly not capable of deciding on their own diagnosis or what treatment was appropriate, with those considered "higher functioning" classified under the now discontinued diagnosis of Asperger Syndrome. Over the intervening years, there has been an explosion of self-expression from those labeled or identifying as autistic, and it has brought with it a dispute over self-diagnosis. Consider the following contrasting views posted on the autism sub-Reddit[1] in early 2023:

> **Self Diagnosing Gives Us Release!!!**
>
> I know there is a lot of hate here and elsewhere against self diagnosers by people that were more properly diagnosed, but I feel this is unwarranted. First of all, be grateful that you got a diagnosis. Those of us who diagnosed ourselves have been through the system again and again, getting misdiagnosed over and over again, to the point where I personally see no point in going through the system again, just to be gaslit into believing that my experience is a lie.
>
> Secondly, we MASK better than you. That is the only difference. I know that I, personally have almost every single symptom of autism. I just do a good job of hiding it.
>
> Now before you say anything, let me tell you this is NOT a good thing. Hiding our symptoms only makes relationships harder for us to maintain, because our masks do, and will fall occasionally, and our peers do notice.
>
> **The more time I spend in online autism spaces, the more I understand people who are against self diagnosis**

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> Nothing aggravates me more than seeing those kinds of posts where people claim that the most mundane, normal human person behavior must somehow be an autism thing, just because it is a little weird. Things like singing/talking to yourself, bouncing your leg when you're exited/stressed, leaving the best thing for last when eating or hating certain smells…
>
> Or, even worse, seeing a normal relatable post and then the comments are full of people claiming it to be an autistic, Bpd, whatever thing. As if it meant that you can't have symptoms of different disorders without actually qualifying for a diagnosis. Everybody stims. Everybody hates certain sensory input. Most people probably have one or the other niche interest that they would know more about than the average person. Every person misses social cues every once in a while. Autistic people just do these things repetitively, or they make their day to day lives a lot harder. Please don't let me discourage you from seeking out diagnosis or telling people about your discovery if you think you're autistic. But I hate it that people keep falling into the "everything I do must be autistic for me to be valid" - trap.

What is clear from this is that the disagreement here is not ontological, it is epistemological. That is, both sides of this debate are *realists* about autism, they just disagree over who is best qualified to identify its occurrence. But their disagreement points to a problem: if it is unclear who has the greater epistemic access to the relevant phenomena, then that suggests that what phenomena *are* the relevant ones is unclear.

There is an ever-expanding list of behaviors that have entered lore as indicators of autism. When a social-worker relative first diagnosed my son when he was a toddler it was because of his "toe-walking". And anyone who has done any research on autism tends to start seeing "signs" everywhere—it's as if one thinks one has the autistic equivalent of "gaydar". You start diagnosing everyone, from the famous to passers-by. David Bowie? Possibly. David Lynch? Probably. David Byrne? *Obviously*! Someone with flat affect and a bouncy walk? I wonder if *they* know.

However, even though Kanner's original set of criteria (Kanner 1943) is, of necessity, behavioral, nobody now believes that being autistic is like being a criminal: exhausted by exhibiting a special set of behaviors (although ABA therapy is still very much influenced by behaviorism). The very notion of "masking" shows that the accepted conception of autism is of something that you can have without showing outward indicators. And, to continue the analogy with gaydar, the 1950s psychologists who believed that they could pick out homosexuals by their scores on Rorschach tests—and thereby effectively believed they had *professional-grade* gaydar—were famously proven by Evelyn Hooker to be catastrophically wrong about that (Hooker 1957).

But even if we dismiss the idea that autism is purely behavioral, there is still no consensus on whether autism is a psychological condition, a state of the brain, or a genetic condition. And unlike homosexuality, there is not even a core essence. Our first redditor appears to regard the key indicators as, first, *psychological*, and second, *introspectively accessible*. Our second redditor, however, seems to reject the idea that what makes a certain kind of behavior an indicator of autism is something the individual themselves is best positioned to tell—a clear difference with homosexuality, where there is nobody better placed to tell whether or not one experiences same-sex romantic or sexual attraction (even if one might have reasons to resist accepting that truth).

Previously (Cushing 2012) I have argued that not one of the various well-known theories of autism could explain all of the phenomena noted in the various diagnostic criteria and cited by parents and self-identifying autistic individuals. Various putative essences (mind-blindness, weak central coherence, executive dysfunction, or what have you) have neither succeeded in explaining a sufficient number of the phenomena associated with autism, nor offered convincing rationales for why the phenomena they fail to explain are not in fact indicative of autism. As such these formerly trumpeted accounts of the essence of autism are steadily receding into the clinical past.

At the very least, then, I am an anti-essentialist about autism: autism is certainly not an example of what, in an influential paper entitled "What kind of things are psychiatric disorders"? (Kendler, Zachar, and Craver 2011) the authors call "essentialist" kinds, which represent distinctions in the world that both "exist independently of whether anyone ever categorizes them as such" and "have essences; that is, sets of features necessary and sufficient for something to count as a member of that kind and from which many identifying characteristics of that kind arise" (1143–44).

I drew an *eliminativist* conclusion from my anti-essentialism: without an essence, autism serves no purpose as a diagnosis. This does not imply that there are not genuine phenomena that are sometimes now subsumed under autism that could meet the standard of an essentialist kind, and research into which could lead to a deeper neurological or genetic understanding. That is, autism could be a loose bundle of genuine conditions. But I felt that we have diminishing reason to believe that there is *something* that the name autism corresponds to that is a real natural phenomenon. Instead, "autism" as a concept should fade away into obscurity, as have other terms associated with archaic inaccurate theories of the world, perhaps lingering as an inexact colloquial term—like "neurotic" or "hysterical" or "phlegmatic"—but having no place in psychology or indeed any of the sciences.

The best way to rebut my view would be to demonstrate that in fact autism *is* what is more generally referred to as a *natural* kind, that is, the groupings there in nature to be discovered. This could be done either by showing that it does in fact have an essence (I won't hold my breath), or, alternatively, by arguing that it is possible to be a natural kind without having a clear essence, even though J. S. Mill, who is widely credited with originating the concept, included having an essence as a necessary criterion (Magnus 2014). However, the other criteria Mill posits are more directly related to the use of kind terms in science, and it could be argued that those are the truly important features. They include that kinds should facilitate inductive generalizations (such as "if X is autistic then a, b, and c will be true of them") and that they (that is, the kinds themselves and not just instances of them) should be subject to laws of nature. These requirements are certainly met by paradigm natural kinds such as the elements in the Periodic Table. And were they met by autism, then a diagnosis of autism would reveal many important facts about oneself that one might not have known, as well as providing explanations of why one might have the experiences one has, and a pathway to further research on possible treatments, should one desire them.

A biological model for meeting this standard that illustrates the way one would expect research on the condition to progress would be Down syndrome: a set of observable characteristics is identified (in this case, by John Langford Down in 1866) as jointly instantiating the phenotype of a single syndrome, and the search begins for the basis or common cause of the syndrome. In 1959 the search proves successful, and Jerome Lejeune discovers that the essence of Down syndrome is a full or partial copy of chromosome 21.[2] Now we know that

Down syndrome *is* a genetic condition: that is its *essence*. This knowledge enables us both to understand it and know what kind of treatments, if any, would be appropriate for those who have it and feel they suffer as a result. However, autism makes a marked contrast with this state of affairs. As autism researcher Berend Verhoeff summarizes:

> efforts to identify reliable diagnostic biomarkers, meaningful (biological) subgroups, autism-specific genes or neural circuits, and targets for brain-based and psychopharmacological interventions remain disappointingly unproductive. Current candidate biomarkers for autism—such as particular genetic variants, different brain structures, brain functions, and neuropeptides—are not found in all autism cases (poor sensitivity) and they tend to be associated with many other neurodevelopmental disorders and "normal" conditions (poor specificity).
>
> (Verhoeff 2015, 444)

There is no conception of autism that "carves nature at the joints", then. What does this mean for diagnosis? What does meeting a diagnosis say about one, then, if not that one is *really* autistic (for if autism is not real, how can one be)? Furthermore, does this compel eliminativism? Should autism as a label vanish from science, lingering only in the popular vernacular, if at all?

In this chapter I will consider two prominent camps that accept anti-essentialism but reject at least the kind of eliminativism I espouse. The first camp advocates *realism without essentialism*, while the latter espouses a constructivist view, whereby autism becomes an *identity* that has, if not scientific value, then *normative* or perhaps *political* value.

11.2 Realism Without Essentialism

The paradigm examples of essentialist natural kinds are, as I have said, the elements. But another venerable classification scheme does not seem to qualify, viz., *biological species*. To many, this has suggested that essentialism is too strict a requirement for a kind to be natural and an appropriate subject matter for science. As an alternative, Richard Boyd has argued for *property cluster* kinds as perfectly respectable scientific entities, despite being looser groupings than essentialist kinds. Species form what he calls *homeostatic* property cluster kinds, which exist when there is a mechanism that ensures that a cluster persists because deviations from the cluster have a low chance of persisting. (In species, the mechanism could be gene exchange or an unforgiving environment niche.) That does not mean that they *won't* exist, as mutations can happen in a population, just that they stand little chance of transforming the population. An example might be albinism in leopards: an albino leopard will still be a leopard, which undermines a simple essentialist characterization of leopards, but albinism is a severe disadvantage for a predator that relies on camouflage.

Boyd lists the following as conditions of HPC kinds:

i There is a family F of properties which are contingently clustered in nature in the sense that they co-occur in an important number of cases.
ii Their co-occurrence is, at least typically, the result of what may be metaphorically (sometimes literally) described as a sort of *homeostasis*. Either the presence of some of the properties in F tends (under appropriate conditions) to favor the presence of the others,

or there are underlying mechanisms or processes which tend to maintain the presence of the properties in F, or both.

iii The homeostatic clustering of the properties in F is causally important: there are (theoretically or practically) important effects which are produced by a conjoint occurrence of (many of) the properties in F together with (some or all of) the underlying mechanisms in question.

iv There is a kind term *t* which is applied to things in which the homeostatic clustering of most of the properties in F occurs.

v *t* has no analytic definition; rather all or part of the homeostatic cluster F together with some or all of the mechanisms which underlie it provide the natural definition of *t*. The question of just which properties and mechanisms belong in the definition of *t* is an *a posteriori* question—often a difficult theoretical one.

vi Imperfect homeostasis is nomologically possible or actual: some thing may display some but not all of the properties in F; some but not all of the relevant underlying homeostatic mechanisms may be present (Boyd 1989, 16).

Boyd never applies his notion to the subject matter of psychology, but Kendler, Zachar, and Craver believe that a related notion of *mechanistic* property cluster kinds can. Where Boyd imagines "a vast multi-dimensional matrix of the properties of all living mammals" (Kendler, Zachar, and Craver 2011, 1146) within which his clusters can be found, Kendler et al. ask us to

> consider a different kind of multi-dimensional matrix, one that reflects human mind/brain states. Here the properties…would include genes, cell receptors, neural systems, psychological states, environmental inputs, and social-cultural variables. Only a finite number of fuzzy total mind/brain states exist that are cohesive and temporally stable, some proportion of which represents "psychiatric syndromes". Members of MPC kinds are not similar merely in their superficial properties (like all the things in refrigerators), but because the co-occurrence of these properties from individual to individual is explained by causal mechanisms that regularly ensure these properties are instantiated together. Indeed, MPC kinds are useful for prediction, explanation and control precisely because the kinds are sustained by causal mechanisms. Such clusters allow us to make projective inferences about the past, present, and future on the basis of an item's membership in a kind.
>
> (Kendler, Zachar, and Craver 2011, 1147)

While lacking an essence, MPC kinds clearly meet two other criteria for being natural kinds: non-accidental property clustering and providing the basis for inductive inferences. The crucial element in distinguishing such kinds from groups that just *happen* to share properties is clearly the causal mechanisms. And it is important to stress what is different about how the causal mechanisms operate in MPC kinds from how they operate in essentialist kinds, where, for example, the macro properties of an element are explained in a straightforward way by its atomic structure. The causes in MPC kinds can operate differently in three key ways. First, the heterogeneity of the causal pathways: symptoms may be explained by factors at any other level, or even by other symptoms. Second, the causation could be probabilistic rather than sufficient. Third, clusters of symptoms might

be multiply-realizable—the result of "different etiological, underlying or sustaining mechanisms in different cases" (Kendler, Zachar, and Craver 2011, 1148). The effect of these differences is that MPC kinds can avoid the criticism directed against any "magic bullet" single-essence theory that none has been found that is even close to explaining the wide range and diversity of the symptoms currently taken to indicate autism.

But look at what each difference means in practice. If the explanation of one symptom is allowed to be *another symptom*, then, for example, the GI issues commonly found in people labeled autistic could explain, say, mood swings that are also sometimes associated with autism. But then, exactly what is the contribution of *autism*? Aren't we just witnessing a kind of GI disorder, that a person could have without having any of the other symptoms of autism? It seems like, in effect, we're saying "when this causal pathway operates in somebody who has other *causally unrelated* symptoms associated with autism, then both phenomena are symptoms of autism, but if it does so without the other symptoms, it is not". That is, entirely extrinsic factors are allowed to determine whether or not a phenomenon is a symptom of autism. This seems of dubious explanatory merit.

Probabilistic causes are not necessarily problematic in themselves, but when combined with the explanatory vagueness of the heterogeneity of pathways it makes it very hard to know *which* phenomenon is causing which other phenomenon. This problem could be solved if the effect and one putative cause could be isolated from all other possible causes, but then that would mean that we have a cause/effect pair that could occur isolated from all other putative symptoms of autism, and once again autism's explanatory value would be erased.

Finally, multiple-realizability of clusters suggests that autism is located at the level of the symptoms. That is, suppose difficulty in maintaining eye contact can be explained by several different (unrelated) underlying psychological/neurological/biochemical causes. For them all to be instances of autism despite the difference in underlying causes suggests that autism is found wherever its symptoms are found. But, as our second Redditor pointed out, one can display symptoms without being autistic, and as our first Redditor pointed out, one can be autistic and "mask" by not displaying symptoms, strongly implying that if autism is a thing, it's a common underlying mechanism, not the observable symptoms. Multiple-realizability is a phenomenon used to argue against the possibility of reductionism in other debates. For example, if Martians' neurology is very different from ours, then "pain" cannot be reduced to the activation of brain states that they do not share. This would of course mean that pain treatments cannot be uniform across Martians and Earthlings. The implication for autism of multiple-realizability of its symptoms would be that, should one desire treatment for one or other of the symptoms, "autism" would be no help in deciding on that treatment. Once again, autism drops out as a medically or psychologically useful category, and we are looking at the symptoms in isolation.

Nonetheless, our authors insist that MPC kinds are natural in the sense of being independent of human conceptions: "the identity of the disease across time and across cultures is grounded in the similarity of the complex, mutually reinforcing network of causal mechanisms in each case" (Kendler, Zachar, and Craver 2011, 1148).

Is this false advertising, though? A significant barrier to *any* MPC kind achieving cross-cultural stability is the inclusion of the "social-cultural variables", as Verhoeff (2013), citing a study by Daley and Sigman (2002), persuasively argues. For example, Indian psychiatrists were more likely to detect and emphasize social deficits, whereas English and American psychiatrists were more likely to diagnose deficits in language development, where this

difference is plausibly explained by the contrasting cultural importance of conformity and "milestones" (Verhoeff 2013, 7). That is, there is no "objective" value-free standard of plotting the points on the putative matrix, and thus what might form a cluster in one culture might not in another.

Finally, even if MPC kinds did qualify as in some sense natural, and the appropriate object of scientific/medical study, it might be that autism could not qualify as such a kind. While MPC kinds do not require a (single) cause for all symptoms, they do require that all symptoms have *a* cause, and one that can (presumably) be demonstrated, and this requirement, claims Daniel Weiskopf, is not one that autism can meet:

> That is, for any two instances of a disease, there must be either the same mechanisms present, or the same symptom cluster present, or both. But within autism, we find cases being co-classified despite both of these being false.
>
> (Weiskopf 2017, 182)

That is, Weiskopf asserts that it is possible for two people both to qualify as autistic but have *nothing* in common. As the now-trite epigram has it, "when you've met one person with autism, you've met one person with autism". Surely this means autism must be at best an umbrella term bundling together distinct conditions, and perhaps even a socially constructed bundle concept that is a product of a spatiotemporally specific cultural moment, in the way that "weird" is.

Weiskopf, however, is not prepared to give up on a realistic view of autism. He offers instead a "network model" of autism:

> I suggest that what unifies autism is its network structure. In building a network to represent a disorder, we begin with the heterogeneous set of actual cases: particular patients, with their unique histories, biology, experience, and patterns of strengths and deficits. From these cases we can, via abstraction and idealization, generate the set of idealized exemplars that represent, given our present interests, the explanatorily important core case profiles. Each focal exemplar in the set is connected to at least one other in virtue of their sharing some theoretically significant property. This might be a common genetic etiology or developmental pathway, a somatic biomarker such as chronic inflammatory response or GI troubles, a shared neuroanatomical alteration or pattern of cognitive traits, or a set of behavioral proclivities. This chaining of exemplars allows the creation of a networked category in which there is no set of properties that all or most members have, but where each member is nevertheless connected to another by at least one theoretically significant property.
>
> (Weiskopf 2017, 182)

> The motivation for co-classifying different-seeming cases, then, is that they are members of the same network. However, if these cases are separated by a distance of several links, there may be relatively little resemblance between them, and few causal mechanisms that they share. One patient's case may, for example, involve a preterm birth followed by consistently lagging development, moderate or severe ID, and poor language use, while another might involve a period of normal development without ID followed by

> regression in social contact and hypersensitivity to auditory stimuli. This is, of course, exactly what lies behind the complaint made by eliminativists that these individuals may have radically divergent capacities, experiences, and life prospects. All of which is true enough, but no objection to the network model, since the basis for classification here is not any particular shared syndrome, no matter how idealized.
>
> (Weiskopf 2017, 183)

Speaking for the eliminativists, I am not mollified by this proposal. Indeed, this looks like capitulation presented as success. Surely the point of realism is to be informative, to go beyond something like Kanner's initial list of symptoms and explain what links them together. It is only when one can do this that one can make progress: progress toward a more accurate description, allowing us to prune away some of Kanner's list and add other features, and progress toward treatments or cures, for those who regard their diagnosis as a misfortune. But this looks as if Weiskopf is just *anointing* a list like Kanner's as autism. There seems to be no way to demonstrate that autism is *not* real: one imagines Popper turning in his grave. Even a gentle form of eliminativism that allowed that autism could be a catch-all shorthand for a set of conditions each of which could occur without the others without itself being a natural kind is ruled out by fiat by Weiskopf:

> even the question of whether there is one disorder here or several strikes me as unimportant: the network taken as a whole is the unit of analysis… The network model presented here…has two overarching goals: first, to be a descriptively accurate account of the structure of the family of autisms, given our current knowledge; and second, to show how classifying specific problems and profiles as belonging to this family can bring out their commonalities and, ultimately, contribute toward better understanding and treating them. These networks reflect one sort of structure in the world that accommodates these demands tolerably well; better, I have argued, than does the eliminativist's prospective erasure of any such category.
>
> (Weiskopf 2017, 185–86).

This seems to me to get it backwards. The network model does not "bring out" commonalities, it *presupposes* them. That is, every human ever shares a vast network of commonalities with at least one other human, so in picking out the kind of commonalities that are relevant to membership of a proposed autism network, one presupposes an already-established autism definition. Sam Fellowes has recently argued that not just diagnoses but symptoms are "constructed" by diagnosticians—that is, classifying behavior *as* a symptom of a disorder is a constructivist process, and the same behavior that is identified as a symptom in one context would be dismissed as such in another (Fellowes 2021)—and if that is true, then Weiskopf's network itself is not discovered but constructed. Weiskopf's view seems to me anti-scientific. Instead of looking to the world to construct our conceptions, we are going to the world with preconceptions and "finding" what we are looking for. Of course, there is a limit to the extent we can prevent this process happening in sincere attempts at scientific discovery, but to have it justified so baldly is rare. Weiskopf suggests that the mere act of placing the behavior and/or neurological states of an individual seeking diagnosis within the autism network "contributes to better understanding" and aids treatment. But given how loose the network is, it is fair to ask exactly what understanding is

gained. You are told that you have the "same kind" of condition as somebody who shares none of your symptoms. You are "like" that person in name only. Suppose we claim that the knowledge you have gained is that you and that other person both have symptoms of autism. First, there is no reason to believe you will *also* develop any of that other person's symptoms, because there is no necessary causal mechanism connecting any of your symptoms with theirs. And second, there will be people who have *exactly the same symptoms* (with, potentially, exactly the same causes) who do *not* have autism, simply because they don't have *enough* of the "autism" symptoms to qualify for a diagnosis. So, for them, the symptoms are *not* "symptoms of autism". Again, suppose we say for this person that falls short of a diagnosis that they *do* show symptoms of autism, even though they are not autistic, because many people who have those symptoms also have enough of the others to qualify for a diagnosis. I think this is starting to happen and is what our second Redditor quoted earlier is complaining about, because there is no reason to call them symptoms of autism when there may be many, many people who do not meet a diagnosis who have them. Nothing about this is a scientific process: it's a process of social contagion, like the way that different slang terms spread in different generations. The only "knowledge" that has been gained is that the diagnosed individual has learned what the diagnostician likes to call them, nothing more of any substance.

I conclude that the lack of an essence really is fatal to the kind of realism appropriate to a term that is the proper topic of medicine and psychology. To reiterate, this does not mean that I don't think that there are real symptoms of real conditions, sometimes genuinely disabling conditions, that get commonly identified as autistic. But those conditions have an essence and hence present a research program that holds out the hope of greater understanding in the future. Autism as an umbrella term does not. As Richard Hassall writes:

> To summarise, neither autism nor ASD appear to have much value as explanatory concepts in science. They do not explain the pattern of symptoms in individual cases, since the aetiology is unknown in most cases. In addition, the predictive and discriminative validity of ASD is very limited, since decisions about treatment and predictions about outcome are determined at least as much by other factors concerning the individual as by the diagnosis itself. Moreover, the fact that autism has undergone several significant changes in its conceptualisation since its introduction by Kanner suggests that there is no reason to assume that its current description in DSM-5 will endure any longer than previous versions. Indeed, some autism researchers now expect the diagnosis of autism to undergo further evolution in response to new research. It is difficult therefore to see how autism or ASD can be conceptualised as a natural kind of psychological disorder.
>
> (Hassall 2017, 11)

Of course, the fact that autism is still regarded as a genuine diagnosis and appears as a disorder in the DSM-5 means that it is in the interest of those who have possibly genuine conditions of the kind that I have suggested could be grouped under autism as an umbrella term to get an autism diagnosis if they want access to services and treatments. Thus one can empathize with the frustration of our first Redditor who fails to get a diagnosis.

In saying that there may be genuine biological phenomena often taken to be symptoms of autism, even if they are not united by a genuine natural phenomenon, am I opening the door to a different kind of realism about autism? By analogy, even if race has no biological

reality, the body features that are taken to be racial indicators—nose shape, hair texture, skin tone, and so on—are biological realities, and although biological essentialism about race has proven untenable, and with it the notion that races are natural kinds, it remains true that for oppressed minorities in racist societies, one's race is *experienced as real*. That is, one's race is not a matter of choice: however much one might fail to identify with one's assigned racial category, it is a fact recorded in censuses, on birth certificates, and so on, and in the minds of strangers who look at one and respond to the socially assigned "race indicators" (be they skin color, as in Brazil, or lineage as in the USA, or otherwise).

Race, then, has a kind of *constructed* reality. Our racial concepts do not track natural divisions (we do not discover them in nature, we project them on to it), but racial categories are genuine artifacts, like tables or buildings, that humans have added to the stock of entities in the world. Such a view of the reality of autism also might explain the lack of essence. As anyone who has tried to give a definition for objects like chairs will know, it is surprisingly difficult to come up with a satisfying set of necessary and sufficient conditions that captures all recognizable instances. So we might expect constructed categories to be "fuzzier", and because they are not *meant* to capture anything essential about the natural world we do not expect them to meet criteria for natural kinds like being the subject of laws of nature. So, if autism is an example of a social construct, it looks like the reasons for eliminativism I have considered above are blunted. However, that is only true if it is widely understood that autism *is* a social construct. If, on the other hand, it is generally believed that it is a natural kind, and medical conclusions are drawn from this, then this amounts to dangerous misinformation.

Currently, a diagnosis of autism is supposed to reveal something about oneself. This might be welcomed, or it might be a terrible shock, but either way, the diagnosis should open up huge resources of self-discovery, explaining features of oneself that used to mystify or alarm one, or, for those that find the diagnosis unwelcome, it could be a moment when one's presumed idiosyncrasies are pathologized. However, if it is a social construct, that will not happen. All one will learn is that people who share a particular subset of one's observable behaviors are, in this particular time and place, lumped together under one label, like the nerds in an 80s high school movie. Furthermore, even should one embrace the label, one is in a precarious position. Like the racial subgroups that once proliferated in Louisiana, one could find one's membership of a group vanish as times change or as one relocates to a new region.

With race, there do seem to be some reasons to oppose eliminativism, even if it is also true that distressingly large swathes of the population remain ignorant of the constructed nature of racial concepts and persist on misconstruing races as natural kinds. Indeed, if everybody believes in the reality of races, then racism persists, and not only is solidarity within racial minorities the most effective means of fighting back, there can be no chance of reparations if racial categories simply vanish. Can a parallel argument be made for opposing eliminativism about the concept of autism?

11.3 Constructivist and Political Views

In "The reality of autism: On the metaphysics of disorder and diversity", Robert Chapman, having first rebutted arguments for autism as a natural kind or even a "practical (i.e., medically useful non-natural) kind" (Chapman 2020, 801), nonetheless rejects eliminativism. Noting that "[a]ccording to the neurodiversity view…denying the validity or reality

of autism seems to be taken more as a political act of misrecognition than as a position in psychiatric nosology", Chapman declares:

> My core positive aim is to show that autism is a politically useful classification indicating something real, in line with the neurodiversity view, and to provide a framework for understanding this reality. In doing so, I aim to…fend off the proposal to abandon the concept of autism altogether.
>
> (Chapman 2020, 801)

How might a concept be "politically useful"? Let us use the notion of a *nationality*, or national identity as an illustration. It is in the interests of certain political actors if the notion of a specific national identity is widely accepted in a population. It unites those who fall under its label so that they will be more inclined to involve themselves in projects beneficial to others of the same "kind", and can be mobilized in war against those who are not. Think of the oft-quoted directive of Massimo d'Azeglio, "we have made Italy, now we must make Italians" (Killinger 2002, 1). National identity concepts have many features in common with the concept "autism". In one way, they do seem to respond to certain facts about the world. There are features that most people of the same nationality share, while at the same time, it is possible to find two individuals grouped together by nationality that have next-to-nothing in common. Moreover, if you ask different members of the same nationality to describe the essence of a person with that nationality, particularly if they are on opposite extremes of the political spectrum, they will give radically different answers. The disagreement extends to whether or not certain cultural artifacts—ways of speaking, dressing, eating, behaving (etiquette and mores) and even kinds of physical appearance—are part of the definition.

For any nationality, there will be a narrow legal definition that might seem to provide the definitive set of criteria determining who has it and who does not, but control over what criteria are included is the province of a select political elite, and who can change them arbitrarily. Furthermore, those who view their nationality as part of their essence believe that they should have a say in whether or not more "borderline" cases are "truly" also members, giving rise to disputes about "authenticity" that challenge the contested members' self-identity.

Of course, the scientific utility of national identity kind-terms is minimal, especially in the modern world with easy travel and constant migration. But, in contrast with the current dominant understanding of autism, there is also very little sense (outside of certain far right enclaves) that they *have* scientific utility—and certainly none that they have *medical* utility, and as such, there are not the same reasons to be an eliminativist about them as I have suggested there are for a medical term that has no essence. There are, however, ample moral reasons to wish that national identities would disappear, given the role they play in both inter- and intra-national disputes. The defenses of them are similarly normative and fall broadly into two camps. One points to the value of *intersubjective autonomy:* think of Ernest Renan's claim that a nation is a "daily plebiscite" (Renan 1939), in Benedict Anderson's phrase, "an imagined community" (Anderson 1983), or, as Yael Tamir puts it:

> A nation, like lovers or friends, is the kind of group whose existence cannot be inferred from the mere existence of certain shared objective features but must refer to the members' shared consciousness and feelings of communion.
>
> (Tamir 1996, 89)

Here the reality of the nation is in the minds of those who identify as that nationality, and its value is in their joint self-government. In some sense the nation becomes a person composed of its nationals, and the concept each has of their nationality combines to form the nation's self-concept.

There is extra value in self-government for a group that has been previously oppressed, of course: hence the drive for secession and self-government that produced East Timor and South Sudan. And in a manifesto about the way forward for critical autism studies, Woods et al. exhort autistic scholars to "pursue the emancipation of the autistic population" (Woods et al. 2018, 975). This suggests, or at least is friendly towards a conception of autism as a *shared political identity*, a view Chapman discusses, and for which suggests a few advantages. The first is the theoretical advantage we have already considered: if autism is a socially constructed shared political identity then that would explain why it has no clear essence, and why the definitions even in diagnostic manuals that purport to be naturalistic are constantly shifting. This then removes anti-essentialism as a reason for eliminativism: "autism" as a concept is not failing to meet a required standard, it is behaving exactly as one should expect.

The other advantages Chapman lists are all salutary effects on the well-being of the bearers of the shared identity. These include the development of an autistic-specific vocabulary, inculcating a sense of belonging amongst others who share that identity, improvement in self-understanding and acceptance by those given a diagnosis later in life. [Some evidence in support of such putative benefits of getting a diagnosis can be found in the profusion of Reddit posts about seeking one, and the usual relief found in getting a positive diagnosis. However, seeking a diagnosis is not without its pitfalls. For example, you get posts that regret positive diagnoses ("Sometimes I feel like they misdiagnosed me and I'm just an imposter"), and negative ones ("Went for an official diagnosis the other day and left disappointed").]

A final plus for shared identity is an improvement in self-esteem resulting from the neurodiversity movement's push-back against the idea that it is a disorder. There is a certain tension with this source of self-esteem and the acceptance of the expertise of the authors of the diagnostic manuals whose criteria determine one's autistic status that we shall explore below. But in general, all of these life-improving benefits track with many cultural identities, including racial ones, especially if you replace "disorder" with "inferior" or "other".

All of this is well and good, but here are some *negative* aspects that can be true of shared political identities more generally, and in particular the treatment of autism as such. First, it is hard to produce a *purely* political conception of autism, just as it is with nationality. Hardly any citizen sees themself as partaking in a general will as an active author of the nation's very intersubjective existence. Instead, people view their nationality is simply a fact about them, out of their own control, and their view of the nation tends to be based on national myths and inculcated through jingoistic indoctrination. And not only is there no Rousseauean direct democracy in this "self-government", it is almost never the case that the most recognized representatives of this group, whether internally or in negotiations with society in general, are actually elected in anything approaching a democratic fashion. "Social kinds" are isolated from the kind of liberal critiques that assess the fairness of power structures in the wider political world, with undue influence going to self-appointed elites.[3] And things are complicated further in the case of autism, because there is struggle between the medical elites responsible for diagnostic criteria and gatekeeping and the neurodiversity advocates, who nonetheless accept that autism is a natural kind, just dispute that it is a disorder.

That is, the establishment of a kind-term as a political entity draws a bright line between those who are entitled to be party to its definition and those who are not. This may explain part of the debate about self-diagnosis with which we began this chapter. The difficulty with "autism" is that, given its accepted social status as a *medical* term, the expertise is still putatively in the hands of the psychological/medical "experts". Now that this remains so is important for people labeled autistic as a means to access treatment and accommodations. Ironically, were it to become accepted that the "reality" of autism is purely social, then these accommodations would be likely to dry up. Indeed, a conspiracy-minded observer might suspect insurance companies have an incentive to push social constructivism as a way to get them off the hook. But those who identify as autistic also have a reason to hold on to a naturalist conception of autism (as we saw that our two Redditors did) because otherwise a diagnosis doesn't *really* tell you who you are, it just tells you what you're labeled. "Authenticity" is very important to social kinds of this nature, in a way that can lead to ugly debates and internecine squabbles, as we see playing out with the kinds "woman" and "black", in the US in particular. So, on the one hand, for an identity to have a certain kind of cultural capital, it must be that the bearers of that term *do not have a choice about it*, which is of course true if there is a natural essence to it. But on the other hand, once an identity is firmly established, those who have it are taken to have the most say about what it *is* to have it. Inevitably, there are people left out who want to identify but to whom membership is denied. This is the crux of the disagreement over self-diagnosis. Consider these complaints from Redditors:

> I brought up autism to my doctor. We had a small assessment and she came to the conclusion that I can't be autistic because I've told her jokes in the past and have a good sense of humour. Makes no sense to me because my dad is pretty autistic and he clearly has a sense of humour.
>
> I would like to rant/vent. I saw a therapist today that stated that I couldn't possibly be autistic because I wanted a friend.
>
> So I go to the specialist. She's not covered by my insurance, but at $25, I think the consultation is worth it. By the end, her conclusion was something like, "Well, all the symptoms you described fit with autism, but you have evidence of lacking the main things of autism. Namely, autistics can't maintain any healthy human relationships, and you have exactly one, since you said you have had a girlfriend for two years and it's going well. And you are able to communicate effectively sometimes, such as right now at this consultation. Therefore, I have no idea what you have, but it's not autism".

A complaint I have specifically against citing the "life-improving" benefits of a self-identity conception of autism as marks in its favor is that these benefits are also available for *any* such identity, however dubious [think of the signs of the Zodiac, or multiple personality disorder as described by Ian Hacking (2006)], calling to mind Bertrand Russell's tart apothegm, "the method of 'postulating' what we want has many advantages; they are the same as the advantages of theft over honest toil" (Russell 1919, 71). Alternately, given that the vast majority of people who self-identify as autistic are naturalists about autism, these benefits are parasitic on what must be taken by Chapman to be a kind of false consciousness, given that on this account naturalism is a mistake, and autism is a purely social kind. That is, the advantages are like those often attributed to prayer as a selling point even to skeptics.

I cannot bring myself to pray to a God I don't believe in even if it will make me happy and lower my blood pressure. (Indeed, will it even do so, without the requisite belief?)

A final criticism of the shared identity view of autism is offered by Chapman themself. Their complaint is that because the shared identity view requires those part of it subjectively to identify with the kind in question, this excludes those previously labeled "low-functioning" autistic individuals (and also, presumably, the very young) who are incapable of conceptualizing or expressing such an identity.

This brings us to the second broad type of defense of the idea of national identity. Where the value of (and, according to the above, ultimate flaw with) the shared identity view is (inter-) subjective, the *cultural* argument defends nations and national identities because of their necessity to protect the (objective) artifacts of an already existing *culture*. The value of the cultural artifacts can be seen as irrespective of the individuals, or alternatively, the value of the culture can be in what it brings *to* those individuals. This latter is the approach of Will Kymlicka's version of what Yael Tamir termed "liberal nationalism" (Kymlicka 1995), and of the cultural products that he suggests need protecting, language is preeminent.

In fact, there are hints of this kind of defense of autism in Chapman's comments about "autistic-specific vocabularies" (Chapman 2020, 809) and in Woods et al. inveighing against "cultural imperialism" (Woods et al. 2018, 975).

However, Chapman's suggestion, while preserving the idea that one's membership in the relevant social kind is not a subjective or voluntary matter, is much closer to the Marxist view of classes, which might surprise at first, given Marx's view that the existence of classes is a bad sign, but in fact that is a key element in Chapman's analysis.

Chapman does not draw directly on Marx but rather Iris Marion Young's idea of a *serial collective*, where "serial collectives are defined in light of shared external material factors that mutually affect each member of the collective, regardless of whether they actually identify or not" (Chapman 2020, 810). Thus, membership in a serial collective depends *neither* on possession of any particular "essence", *nor* on subjectively identifying as a member. As an example, Chapman gives "all those waiting together for a late bus" (810). Clearly these are looser and more heterogenous groupings than classes, and not inherently negative, but autistic people are, on Chapman's telling, grouped together because of the disabling effects specifically modern "neo-liberal market systems" have on them. That is, he adds to Young's analysis the "social model of disability":

> Although I won't offer a detailed defense of the social model as applied to autism here, it will be helpful to give a few examples of wider factors, both physical and normative, that seem to have systematically contributed to autistic disablement. In this regard, it's worth considering autistic sensory sensitivity and sensory overload, which are central to autistic disablement and are regularly experienced by the vast majority of those who are given the autism diagnosis. While the perceptual-cognitive profile of each autistic person is unique, autistic people characteristically report certain common factors as leading to increasing disablement. Such factors include an increase in open plan offices and the overuse of bright lights in working environments, or neurotypical social practices such as clapping. Despite the biological and psychological uniqueness of each autistic individual, such environments tend to disable all autistic individuals in a way that we can identify as characteristically autistic, for instance, by making them experience "sensory overload" or "sensory fatigue," which can, in turn, hinder social understanding and participation.
>
> (Chapman 2020, 811, references omitted)

As with the shared identity view, this account of autism explains why autism has no trans-cultural essence:

> the explanation of the unity of such "negative" clusters is largely given by their perceived economic or social disutility (which is socially and historically contingent), rather than by a natural grouping…
>
> 'Autism' is a label we give to one such cluster of (purportedly) socioeconomic nonutilitarian psychological and behavioral characteristics, but these traits are grouped in light of collectively being disabled by the same norms and structures.
>
> (Chapman 2020, 812)

A key difference between the shared identity view and this serial collective conception is that there is no longer the sense that the content of what it is to be autistic is under the control of those so classified. That is, the content of the criteria is not editable by autistic people. Of course, the non-verbal autistic people could never do that, and Chapman's primary motivation was to include them, but at the same time Chapman also wants it to be true that, just as under the self-identity model, autists can (and should) push back against the labeling of their condition as a disorder via an assertion of their class-consciousness.[4] However, the content of what it is to be autistic is a result of factors beyond their (immediate) control.

Furthermore, where the shared identity view downplayed the extent to which the humans who identified as the particular social kind are themselves altered by that kind, this aspect is accentuated here. On Chapman's telling, autistic people are *actually* disabled by social forces, not simply labeled as such: "the coherence and reality of autism lies in how autistic people share a specific relationship to current social and political conditions—those that continually **produce and reproduce** autistic disablement" (Chapman 2020, 813). One might put it this way: both are constructivist views, but on the social identity view, it is the content of the concept of autism that is being constructed by the members of the group, whereas with the serial collective view it is the lived experiences of the people themselves that are being constructed.

The "political utility" Chapman claims for this account is clearly different from that of the shared identity view. There the view itself was politically inert, it just described how autistic people benefited from their shared identity. Here, the shared identity is a negative one—shared disadvantage—and the political utility is in *recognizing* that autism is a sign of a political problem that needs fixing. As an example of a good first step they give *Specialisterne*, an organization that aims to solve the problem of autistic unemployment "through a business model that creates environments where autistic people can excel" (Chapman 2020, 813). Again, this parallels Marx's view of classes, and means that Chapman actually has a more complicated relationship with eliminativism than their initial statement of purpose indicated, as we shall see.

While Chapman's illustrative example of a serial collective—people waiting for a bus—is determinedly non-essentialist, it is not clear that their account of autism can be so characterized, and this fact opens their view to conflicting interpretations. Under what I shall call the *core trigger* interpretation, the crucial element that triggers the disabling effect of one's social and economic environment, is, "autistic sensory sensitivity and sensory overload". This is the common core that causes autistic people in particular to be disabled in a specific way,

because the neo-liberal market systems that predominate in modern western societies do not accommodate people with such sensitivities. If *this* is what autism *is*, then Chapman's view is actually a straightforward essentialist view, and as such subject to the criticisms leveled against many past candidates for an essence (mindblindness, weak central coherence, and so on) that (a) this definition excludes some people currently labeled autistic, and (b) it includes some people currently *not* labeled autistic.

The core trigger interpretation fits the idea that autistic people are not essentially disabled, in keeping with the neurodivergence movement view, because if society were organized differently their lives would (for the most part) be as happy and socially valued as neurotypicals'. However, this interpretation does not fit with several of Chapman's claims for their view. For one thing, it would not make sense of the "fuzziness" and cultural relativity of autism, because "sensory sensitivity" is a fairly narrow and non-relativized core essence (if potentially multiply-realizable). And, in fact, in correspondence Chapman outright rejects the idea that their view requires an essence:

> I don't think (and have never suggested) that autism is just about sensory issues. That was just used as one example of a relatively common thing autistic people experience. And even then, I think the sensory differences autistic people exhibit are different in each case (one person may be more sensitive to lighting, another to audio, etc.).
>
> (Chapman, personal correspondence, 10 September, 2023)

Certainly, it would be hard to find a common *biological* essence that explained all such sensitivities, so in that sense Chapman's view is anti-naturalist. But there has to be a particular trigger mechanism that every member of the group has, and that no member not of the group lacks; otherwise, the whole account does not get off the ground. To that extent, it seems that neo-liberal market forces aren't simply *making* people autistic (otherwise they would make *everybody* autistic) they are *revealing them to be* autistic. But this also seems to be something Chapman denies, because, while they explicitly reject eliminativism in this article, their view is a *long-term* eliminativism (as has been hinted above in the discussion of Marxian classes).

> In fact I *am* an eliminativist. One way of viewing the point of a serial collective conception of autism, as I understand it, is that it helps us see how we could change the world in such a way that would make the serial collective a collective no longer, and hence the classification no longer necessary. I just think it is worth keeping right now, since many autistic people have and continue to find it useful to use for political organising at this specific moment. If this changed, or if a more useful classification came along, I'd also be up for dropping the autism construct.
>
> On this issue, I wonder if it might be helpful…to distinguish between short term and long term eliminativists (or something like that), since I do disagree with people who think the concept should *instantly* be abolished.
>
> (Chapman, personal correspondence, 10 September, 2023)

These points suggest an interpretation of Chapman's view of autism whereby the content of autism *comprises* the disabling effects. That is, merely having the sensory sensitivities

does not make one autistic because, in a more accommodating society they are not disabling. Thus:

> Whether any given individual develops in the way we call autistic will rely on the nature of society at any given time… [T]he view that I've defended doesn't deny that autistic individuals will often exhibit rough clusters of characteristics or that many of these traits will be heritable; my point is that whether the exhibition of such characteristics *manifests as autistic* is dependent on contingent factors.
>
> (Chapman 2020, 814)

On what I shall call the *relative disability* interpretation of Chapman's view, one is only autistic if one experiences disadvantages from one's sensitivities. That view explains why we would have no more need for the concept of autism in an ideally accommodating society, but it has somewhat strange implications. Obviously it would mean that while one person in a non-accommodating society would be autistic, their *molecularly identical duplicate* in a better society would not. Thus autism *cannot* be genetic. This is no news to the committed social constructivist, but I think many autistic people would not regard their autism as something that they could lose just by relocating. Furthermore, one wouldn't even have to change societies, merely *jobs*. Chapman suggests that autism has become more prevalent because of the change from the modernist socio-economic structures of the 19th and early 20th century in the West, that valued "autistic traits such as being single-minded, rational, and independent"[5] to the neo-liberal values of today where employment requires that one be adaptable and hyper-social; however, there are plenty of professions that still value those "autistic" traits (recall Chapman's own example of *Specialisterne*), especially with the distance working necessitated by the COVID pandemic. So, imagine a person who could not have handled an office job but who now works remotely from their own home, with the kind of focus that some autistic traits make possible, and is thus successful and valued. Under the interpretation of Chapman's view we are considering, this person *stopped being autistic*.[6] By analogy, they acquired a car and no longer need to wait for the bus, so have exited the serial collective.

Another odd implication of the interpretation we are considering is that autism is *essentially* disabling, because autism *is constituted by* negative disabling effects resulting from the way society fails to accommodate people. This seems to run counter to the neurodiversity message that autistic people are *not* disabled; in effect it means that those advocating for acceptance are not really advocating *for autistic people*. They're advocating that people *cease to be autistic*.

On the relative disability interpretation of Chapman, we seem to have lost anything distinctive about *autism*. If, to be autistic one has to be disabled by one's socioeconomic environment, then this grouping will include huge numbers of people currently labeled with other disabilities, while excluding the members of *Specialisterne*. That is, I think it would be hard for a serial collective defined in terms of how one is disabled by the socioeconomic structure of contemporary Western societies to slice the *kind* of disablement such that all and only the people we currently regard as autistic are selected as members. It seems much more likely that the "kind" will either be too broad—tending toward simply "disabled", or too narrow, including only sensorially sensitive individuals whether or not they would meet a diagnosis as autistic.

It seems that both the essentialist core-trigger interpretation of Chapman (autism *is* a certain set of sensory sensitivities) *and* the wholly anti-essentialist relative disability interpretation are unsatisfactory. Is there a compromise alternative? Consider this analogy: suppose enough people are deadly allergic to peanuts that humankind wipes all peanuts from the planet. Those people still form a genuine subset of humanity even if now there is no outward way to tell, and there is no use for any term that refers to them as a group. Can Chapman similarly argue that, while the concept of autism refers to the disabling side-effects of living under neoliberalism, there is something that those people genuinely have in common *intrinsically*, regardless of what socioeconomic setting they find themselves in? Well, if so, that sounds suspiciously like one of the "cluster kinds" discussed in the first half of this chapter, and subject to the same criticisms.

11.4 Self-Diagnosis Revisited

I have argued that without an essence there is no *there* there and the concept "autism" has neither scientific nor medical value. Chapman agrees with both claims. However, they reject my further assertion that, if autism is a constructed concept, failing to carve nature at the joints, then meeting a diagnosis tells one nothing about oneself.

> I just don't get why you'd claim a social constructionist view is at odds with a diagnosis (or identification) revealing something about oneself. This seems very obviously false to me, so I think I must be missing something here. By analogy, I see being non-binary as a social construct but it has helped me learn loads about myself. Same with autism. Same with a bunch of other things, including both psychiatric and somatic diagnoses. In fact, I can't even begin to imagine how any of us would understand ourselves without using social constructs to do so, or what that would be like. So I just don't get where this view is coming from.
>
> (Chapman, personal correspondence, 10 September, 2023)

I think we have different ideas of what is revealed. My claim is simply that, if our term "autism" just clusters together a set of conditions with no underlying reality (causal or otherwise) linking most of the conditions with most of the others, so that one person labeled autistic could share literally no conditions with another member, then one cannot, on learning that one is autistic, know that one is likely to have other conditions than the ones of which one is aware.[7] Of course, if there really were an underlying "essence" that explained at least the vast majority of the symptoms specific to autism (and they *were* specific to autism and not shared by other conditions), then one *would* learn that one had this essence (be it neurological, genetic or what have you) and learn other things that it caused. But we've agreed that autism lacks this. And, to return to Chapman's own example of a serial collective, if one is told one is waiting for a bus, what else does that tell one about oneself?

Perhaps the self-discovery Chapman has in mind is like this. When my wife and I were first hired into our department, a colleague close to our age took my wife aside and explained what the older guard of the department were like by using characters from Winnie the Pooh. So, one of them was Rabbit, one of them was Owl, one of them was Eeyore, and so on. This was a good shorthand for introducing us to the intra-departmental dynamics and the personalities of each of our colleagues. And I think if somebody were to say to

me "and you're Piglet!" this might cause me to introspect and view some of my personality quirks in a new light. Of course this would be purely a metaphor, and I would have to know that I don't have *all* of Piglet's features (I'm not especially small or easily startled) but in being given that label, certain key features of me would be highlighted and brought to the fore. But again, what this would most reveal is how I come across to this specific other person, which is not necessarily particularly indicative of my "true nature", if there is such a thing. As we have seen Redditors protest, the diagnosticians do not have access to their clients' internal experiences.

So, in conclusion, if autism really lacks an essence, and is simply a bundle of conditions lumped together and given a label, then in having condition x one will neither learn that one has condition y, which is also included under autism, but has no causal connection with x, nor will one learn that one has underlying essence A, because there is no such thing.

Notes

1 https://www.reddit.com/r/autism/
2 This discovery also leads to further progress in identifying three subgroupings of Down syndrome: Trisomy 21, Translocation Down Syndrome and Mosaic Down Syndrome.
3 See Gibson's and Arnaud's chapter in this volume.
4 The serial collective account "still has room for and, if anything, supports the legitimacy of an autistic political identity" (Chapman 2020, 812).
5 Chapman (2020), 812.
6 Obviously they are still likely to be disabled by the lack of accommodations in their non-work life, so perhaps *less* autistic.
7 A more detailed version of this example is found in Cushing (2018).

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