

“Agency and Disability”
Kevin Timpe

Section 1: Introduction

As other chapters in this volume illustrate, there are a number of philosophical issues at play in any stipulative definition of agency. Lots of entities have agency; that is, lots of kinds of things are able to exercise a distinctive kind of causal control that originates, at least in part, within them rather than just passes through them. The discussion to follow in this chapter is limited to specifically human agency. While I don't deny that other kinds of organisms can exercise agency, my concern in this chapter is limited to humans. By 'agency', I mean both the complete set of capacities and abilities that humans have that enable them to do characteristic human activities (e.g., my capacity to make a double-shot of espresso) and the exercise of those capacities (e.g., my having just made and drunk a double- shot of espresso). Many of these capacities, and the exercise of those capacities, will be shared between humans and other organisms, such as the capacities for locomotion, nutrition, and various cognitive tasks. Other capacities and their exercise will be uniquely human; the exact boundaries between those that are uniquely human and those we share with other organisms need not concern us at present.

Agency is typically taken to involve a broad range of capacities and abilities: volition, intention, desire, sensation, emotions, proprioception, bodily control, and the abilities to evaluate reasons and guide one's behavior on the basis of those reasons. The use of 'behaviors' here should be construed broadly, including not only bodily movements (e.g., standing up and walking out the door) but also mental acts (e.g., deciding the order of motor tasks involved in getting dressed). Bodily movements and mental acts are both behaviors in the relevant since they will be 'agentive when . . . sensitive to reasons, that is, able to adjust flexibly its means and goals to varying constraints or opportunities' (Proust 2013, 209f).

For each of these capacities or sets of capacities, there will be disabilities that impact the agent's having or ability to exercise those capacities. In what follows, I look at a number of ways that disabilities can impact agency. However, the discussion also has broader implications than just disabled agency. A central claim of what follows is that looking at how agency and disability relate can tell us something about human agency in general.

I proceed as follows. In section 2, I clarify my approach to the nature of disability. This will make it clear why I think we must engage with the existing literature on a range of disabilities to see how disability affects human agency. Section 3 explores a number of examples in greater detail. Finally, in section 4 I draw a number of lessons about agency from the previous section and argue that they apply not just to agents with disabilities, but to human agency in general.

Section 2: the Nature and Approach to Disability

In the same way that the exact meaning and extent of 'agency' is contentious, so too is the exact meaning and extent of 'disability'. Licia Carlson refers to disability as 'the philosopher's nightmare' (Carlson 2010, 1) in part though certainly not exclusively because of the care needed to approach the topic well. History is full of examples of how thinking poorly about the

nature of disability has led to significant harm against those with disabilities. Careful reflection on disability requires us to think about what disability is (or, better, what disabilities *are*). There are a number of different models of the nature of disability: the medical model; forms of the social model, both strong and weak (see Kahane and Savulescu 2009 for the claim that there is “no single agreed formulation of the social model account of disability” (21); critical realist models; moral models; the Nordic model; mixed models the welfarist model; and others.

In *The Minority Body*, which is one of the most influential contemporary books on disability in philosophy, Elizabeth Barnes cautions against assuming from the outset that a particular model can apply equally well across the breadth of disabilities. In her book, she’s only focusing on physical disabilities. As she argues there, physical disability is sufficiently complicated that we should not begin in a ‘top-down’ approach, seeking a general account or model. Doing so runs the risk of privileging an account of what disability is that may not accurately reflect the experiences of those that have the range of disabilities that the account is supposed to include. Instead, Barnes suggests that we should work in a ‘ground-up’ way that begins with paradigmatic instances of disabilities and works from there toward an account of what disability in general is.¹ This will also be true then not just of physical disability, but for disability in general. For Barnes, ‘a successful account of disability needs to say that paradigm cases of disability are in fact disabilities (and that paradigm cases of non-disability are not).... We want to know what these kinds of things—deafness, blindness, paralysis, achondroplasia, MS, etc.—are, such that they have something in common with each other’ (Barnes 2016, 10). Similarly, disability scholar Tom Shakespeare writes that ‘too often, disability studies is not grounded in an adequate understanding of what I call “actually existing disability”, which means comprehending both the diversity of illness and impairment experiences and contexts, and the breadth of everyday life’ (Shakespeare 2014, 4).

Many treatments of disability, both within philosophy and elsewhere, fail to take seriously the diversity of disability. Like Barnes, I think we should begin our philosophical reflection on disability by first exploring in detail specific disabilities before we seek to treat those disabilities in a unified or overarching way. For Barnes, ‘the best way to approach the question of whether and to what extent different types of disability form a common kind . . . is by first engaging in detailed analysis of the different varieties of disability and then exploring the potential commonalities’ (Barnes 2016, 4; a similar approach is found in Kahane and Savulescu 2009, though I think that their account gives too much consideration to our everyday concept of disability). This approach begins with ostention, pointing to particular paradigmatic cases. Of course, one has to decide which purported disabilities are in fact paradigmatic. But even once this is done, there are two problems. First, if one ultimately endorses a revisionist account of disability, what one originally took to be paradigmatic cases may fail to be paradigmatic, or even fail to be a disability altogether. Second, even if the paradigmatic cases aren’t problematic, there’s the question of how far the boundaries of the category ‘disability’ extend beyond those paradigmatic cases. It may be, as Barnes suggests, that there is no clear boundaries for whether or not a type of physical condition is a disability:

We're often tempted—perhaps as a legacy of naturalistic accounts of disability—to ask questions like 'is asthma a disability?' or 'is psoriasis a disability?' But there needn't be any general answers to such questions. (Barnes 2016, 47)

In what follows, I aim to avoid these sorts of temptations and unifying conceptions. The conclusions I'm aiming for in section 4 don't require us to have an account of what all disability is, nor require that we know exactly where to draw the boundaries around the concept.

One final clarificatory issue regarding disability. Social models of disability are especially influential in disability studies and typically begin by distinguishing impairment from disability. Ronald Berger's description of the distinction is fairly standard:

In this field [of disability studies] a discussion of definitional issues typically begins with a distinction between impairment and disability, whereby impairment refers to a biological or physiological condition that entails the loss of physical, sensory, or cognitive function, and disability refers to an inability to perform a personal or socially necessary task because of that impairment or the societal reaction to it. (Berger 2013, 6)

This distinction between impairment and disability is then used to argue for the claim that while impairment is biological or physiological, disability is 'something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society. Disabled people are therefore an oppressed group' (UPIAS 1976, 4). The social model of disability, and the underlying impairment/disability distinction on which it draws, is extremely influential, both academically and politically. It is now codified, for instance, in the World Health Organization's *International Classification of Impairment, Disability, and Handicap*. But as Barnes has argued, this approach simply pushes the question of 'what is disability' back into the question of 'what is impairment' (Barnes 2016, section 1.4.1). The social model of disability, and the underlying impairment/disability distinction on which it draws, is extremely influential, both academically and politically. It is now codified, for instance, in the World Health Organization's *International Classification of Impairment, Disability, and Handicap*.). Similarly, Shakespeare argues that disability, understood as social, and impairment, understood as biological, are 'always intertwined' (Shakespeare 2014, 22). Thus we cannot extricate one from the other in the way that the social model often does. For these reasons, in what follows I speak only of disability and not of impairment.

Section 3: Specific Disabilities

Given the 'ground-up' approach I've endorsed, exploring the impact of disability on agency will require looking at specific disabilities. In this section, I investigate Parkinson's, a paradigmatic physical disability, a number of disabilities that impact an agent's emotions, and then briefly address some of the wide range of intellectual disabilities.

3.a Parkinson's

Consider first Parkinson's disease. The primary pathophysiologies for Parkinson's are tremor, rigidity, posture and locomotion disorders, and akinesia. While these pathophysiologies can't be isolated from each other in many individuals with Parkinson's, the present discussion will focus primarily on the last of. Akinesia is the 'lack of movement or slowness of initiating and maintaining movement' primarily due to the disease's effect on neurons in the substantial nigra region of the brain, an area 'which is important for control and regulation of motor activity' (Weiner *et al.* 2001, 5). Akinesia makes it difficult for an individual to walk or engage in other whole body movements, particularly when they involve more than one action plan. (This is one of the reasons that the pathophysiologies in Parkinson's can't be separated from each other.) For those with Parkinson's, 'normal voluntary actions may be impaired by difficulty in initiation as well as slowness of movement, both of which may be apparent during most activities. In addition, sudden freezing or involuntary cessation of ongoing activity, which is referred to as *kinesia paradoxa*, may be seen' (Donaldson *et al.* 2012, 249). Most individuals with Parkinson's are able to briefly overcome, or at least mitigate, their akinesia or other motor control difficulties. However, high levels of concentration required to do so can't be sustained and thus the reprieve from akinesia is often short-lived.

The difficulty to initiate movement caused by Parkinson's to initiate movements isn't consistent across contexts. The difficulty self-initiating movement is significantly more pronounced than it is in response to the command by another agent, which is 'relatively well preserved' (Donaldson *et al.* 2012, 237). Numerous studies have found that this impact is most pronounced when spontaneous generation of task-specific motor planning is required, leading researchers to believe that 'the presence or absence of impaired performance appeared to hinge on the degree to which internally, that is subjectively, organized guidelines are required for success' (Donaldson *et al.* 2012, 279).

Furthermore, the impairment temporally disappears in certain environmental settings:

Sudden dramatic events, such as the ringing of a fire alarm or a gunshot, can galvanize the patient with Parkinson's disease into remarkable and short-lived activity. [Parkinson's researchers] Schwab and Zieper [give] a number of graphic 'examples of the sudden elimination of the disability of Parkinson's and almost normal performance under the calamity of stress such as a flood or fire.' In the emergency the patient is able to function in a nearly normal manner for a very brief time over a minute or so. The exact mechanism for such a dramatic reversal of parkinsonian disability is unknown. However, the phenomenon must indicate that the basic pathways for voluntary action are intact, although the pathology of the disease interferes with or blocks their normal use. (Donaldson *et al.* 2012, 249)

This suggests that whether an individual is prevented from executing a particular task Parkinson's depends not just on the underlying disabling condition, but also upon facts concerning the environment in which the agent acts. And though space constraints prohibit details, a similar conclusion can be raised from the examination of other physical disabilities.²

3.b Emotional Blunting and Alexithymia

I turn now from physical to emotional disabilities. Numerous disabilities lead to emotional blunting or flattened affect, a decrease in the frequency or strength of emotions, both positive and negative (see, for instance, Kim 2015). Emotional blunting is commonly associated with schizophrenic syndrome and fronto-temporal dementia, or FTD (see Berenbaum *et al.* 1987, 57 and Williamson and Allman 2011, 104 respectively). In some cases, FTD's emotional and social impact may be more significant than the cognitive and neuropsychological deficits it causes. Decreased social tact and propriety, abulia, disengagement, and decreased behavioral regulation can all be rooted in FTD's effects on the emotions. Individuals impaired by FTD can become emotionally detached; have a decrease in autonomic emotional responsiveness; lose empathy and willingness to comfort others; and more frequently fail to comfort or help others in distress, even if they are family members or close friends (Mendez *et al.* (2006), 242—245).

Emotional blunting can impair other emotional responses, not just those involving empathy. Individuals with 2p15-16.1 Microdeletion Syndrome, which involves a deletion on the short (p) arm of chromosome 2, typically involves a number of physical affects (e.g., microcephaly, vision problems, kidney abnormalities); speech impairments; gross and fine motor control issues; and cognitive and developmental disabilities (2p15p16.1 Microdeletion Syndrome 2014, 4 and 7; I talk about this condition at greater length in Timpe 2016). It also typically involves mild to severe intellectual impairment and problems with executive function, which can lead to both emotional blunting and alexithymia (Hancarova *et al.* 2013, 2).

Though not an official diagnosis in the *DSM-V*, alexithymia is 'marked by difficulties in identifying and describing feelings and difficulties in distinguishing feelings from the bodily sensations of emotional arousal' (Bird *et al.* 2010, 1517; see also Ricciardi *et al.* 2015). Alexithymia, like emotional blunting, has been clinically associated with reduced empathy (Bird and Cook 2013). And while there's not as much evidence to be sure of this stronger claim, there's at least anecdotal evidence suggesting that some individuals with alexithymia may have difficulties experiencing certain emotions (e.g., shame, jealousy, or self-resentment) altogether. Individuals with Down Syndrome often have difficulty in being able to identify and label the emotions of fear, anger, and surprise, and some individuals with autism show differences in emotional self-reports and expression (Kasari *et al.* 2012, 240 and 244). Insofar as human agency involves emotional regulation, we see here another range of influence of disabilities.

3.c Intellectual Disability

Intellectual disability is a particularly challenging category of disability to address. Intellectual disability is defined by the World Health Organization as:

a significantly reduced ability to understand new or complex information and to learn and apply new skills (impaired intelligence). This results in a reduced ability to cope independently (impaired social functioning), and begins before adulthood, with a lasting effect on development. (WHO 2010)³

Similarly, the DSM-V points to both deficits in intellectual functions and deficits in adaptive functioning as a result of those intellectual functions as essential elements of the diagnostic criteria for intellectual disability. There are over 1000 known etiologies of intellectual disability, and each “differs from all the others in meaningful ways in virtually every aspect of functioning” (Burack 2012, 4). Furthermore, over half of individuals with intellectual disability show no known cause for their disability (Iarocci and Petrill 2012, 13).

Intellectual disability also ranges widely in terms the particular capacities and abilities impacted, as well as the degree to which they are affected. All of the following are included by psychologists and neurologists as belonging to the set of capacities and abilities involved with intellectual disabilities: spatial mapping; attentional abilities; memory, both short and long term and working; cognitive flexibility; linguistic skills including vocabulary comprehension, expression, lexical and syntax skills, grammatical morphology, and pragmatics; literacy; conversational skills; comprehension. Intellectual disabilities⁴ can impact agential planning, learning, adaptive behavior, and social interaction. Intellectual disability can make it hard for an agent to exercise a range of other skills well and to plan well for the future. In some cases, those with intellectual disabilities might be “unable to imagine that range of alternative possible futures that are, given their social circumstances, futures that it would be realistic for them to attempt to make their own” (MacIntyre 1999, 94).

Regarding the degree of impact, intellectual disability from mild learning or developmental disabilities to anencephaly, where the neural tube fails to close during neonatal development resulting in the lack of a cerebrum. Most cases of anencephaly result in miscarriage, and those that are born alive usually die from cardiorespiratory arrest within days. The DSM-V specifies four levels of severity of intellectual disability: mild, moderate, severe, profound involving evaluation across conceptual, social, and practical domains. Unlike previous classifications, the DSM-V has moved away from primary reliance on IQ tests toward a combination of clinical assessment and standardized testing for diagnosis.⁵

There’s a danger of focusing on the agential impact of intellectual disability, particularly severe cases of intellectual disability, given the ways that those with intellectual disabilities have been mistreated, even to the point of institutionalization and forced sterilization, in even not-too-distant history.

As indicated earlier, the discussion here of physical, emotional, and intellectual disabilities isn’t intended to be exhaustive of the ways that disabilities can affect human agency. All sorts of other disabilities not examined here have a wide variety of implications for agency. Depression, which according to the National Institutes of Mental Health, is the leading cause of disability worldwide, impacts not only the emotions but also the motivational capacities involved in agency (for work on the connection between depression and moral psychology, see Hansen 2004, Roberts 2001, Silberfeld and Checkland 1999, Ardal 1993, and Caton 1986). Lesch-Nyhan syndrome causes an overproduction of uric acid that disturbs the nervous system causing cognitive, neurological, and behavioral abnormalities such as choreoathetosis and other involuntary movements, ballismus, and self-injurious behaviors (see Lloyd 1981). The

discussion in this section is intended to merely be highlight a limited cross-section of the total impact of disabilities on agency.

Section 4: Lessons from Disability for Agency in General

In the present section, I want to draw three lessons about human agency on the basis of the disabilities canvassed in section 3. I do not, however, think these lessons exhaust the importance of considering disability for a full understanding of human agency.

A number of scholars argue that agency, and moral agency in particular, should be understood as a degreed concept. For instance, consider the following passage from Jeanette Kennett, with a particular focus on agential self-control:

Moral responsibility comes in degrees. The ordinary view implicitly recognizes both degrees of difficulty in the exercise of self-control (and indeed of judgement), and a distinction between those who are capable of synchronic self-control and those who must instead rely on diachronic techniques of control. Factors which impinge on the ease with which the capacity for self-control can be exercised mitigate responsibility. Some of those are obstacles to good judgement as well: for example, tiredness, emotional pressures, and lack of information. (Kennett 2001, 182; see Coates and Swenson 2013; Nelkin 2014; and Vargas forthcoming; for further discussion of this point, see Timpe 2016, particularly section 3)

If tiredness can impact self-control, then surely disabilities can as well. (For a discussion of how a range of disabilities affecting executive function tasks impact agency, see Timpe 2016.) And self-control, like many other agential abilities, is best thought of as degreed, rather than binary. (See Smith 2017 for an excellent discussion of the degreed nature of agential abilities.) Volitional control, rationality, emotional regulation, bodily control, sensory awareness all are degreed. The facts that disabilities evidence considerable heterogeneity and that the same disability can manifest in such a wide range of agential impact (e.g., individuals with Down Syndrome exhibit significant differences in terms of their degree of intellectual impairment) give us further reason to think that agency is a degreed concept. In part because we typically think of idealized agents rather than agents with disabilities, we can fail to take seriously enough the degreed nature of the capacities and behaviors involved in human agency. (I think a similar point is true of much philosophical reflection on mental illness and childhood development too, though I don't develop this line of inquiry here.)

Second, reflection on disability and agency reminds us that our agency is socially and ecologically dependent. Much contemporary philosophy seems to endorse an atomistic and individualistic approach to human agency. But we shouldn't make this assumption, as reflection on disabilities shows that the social context of our agency matters. It may be that the capacities involved in human agency themselves depend on the agent's social or environmental situation, and such that agency itself depends, at least in part, on those social or environmental factors. On this understanding, we can change what the agent is able to do either by changing factors

intrinsic to the agent or by changing the environment the agent is in (although the disjunct here isn't always inclusive). However, a slightly more modest claim is certainly true, namely that the agent's exercise of those capacities depends on the social or environmental setting the agency takes place in. On this understanding, what the agent can do is a function of just the agent, but what they will do depends on the social or environmental situation and the number of supports that it provides. (For a further development of this point, see Timpe 2019.) Human agency can be socially scaffolded, where such scaffolding involves "the externalization of certain parts of the decision making process [or agency in general] that are not typically externalized" (DeVidi 2013, 193). DeVidi continues that "this externalization does not undermine the claim to autonomy" (DeVidi 2013, 193). Certain disabilities can decrease forms of autonomy, but this in no way means that all disabilities do. Furthermore, it certainly doesn't mean that all disabilities completely undermine autonomy. The sorts of autonomy ruled out by disabilities are plausibly forms that aren't possessed by human agents even apart from disability.

As Alasdair MacIntyre has argued, no human is a 'fully independent practical reasoner' (see MacIntyre 1999 and Clifton 2018). One of the dangers in defining intellectual disability in terms of 'a reduced ability to cope independently' is that it wrongly suggests that human agents are more independent than they really are (see Clifton 2018, 131f). Overstating the independence of those without disabilities can increase the disenfranchisement of those who do have disabilities (Kittay 1998, 77). Even the independence that we do have develops in the context of our social environments.

Finally, and related to the first two lessons is a third, which is that there are degrees of difficulties involved in successful human agency. Consider again the discussion of Parkinson's, and how whether an agent is able to self-initiate movement. An agent's ability to self-initiate movement depends on the degree of their condition's progression, how long they've been exerting this kind of control, and environmental variables. How likely they are to succeed will vary with all these factors. Disabilities may increase the fallibility of an agents' abilities, but there are good reasons to think that abilities in general are fallible (see Smith 2017, section 3).

Furthermore, there's reason to think that not just agency itself but morally responsible agency is also degreed. Dana Nelkin has argued, in my view convincingly, that the degree of difficulty can affect the amount of blameworthiness or praiseworthiness an agent deserves:

For example, we often excuse people to an extent when doing the right thing would be very, very difficult. In turn, difficulty can be understood in at least two ways: on the one hand, it can be understood as requiring a great deal of effort, and, on the other, it can be understood as requiring a great sacrifice of one's interest. These often go together, but they might come apart. (Nelkin 2014, 357)

Disabilities can impact both of these ways of understanding the relevant sense of difficulty, and some disabilities might impact both.

Conclusion

Most recent analytic work on agency has tended to focus on instances of what above I suggested might be thought of as ‘typical’ agency, focusing on ‘clear-cut paradigm’ agents while bracketing issues related to developmental psychology, mental illness, or disability (Shoemaker 2015, 5). There is very little discussion of what Shoemaker calls ‘marginal agents’, even though he argues—rightly I think—that these cases can teach us quite a bit. While that restriction and the related idealization of human agency is perhaps sometimes justified, it can result in a skewed understanding of human agency. As I’ve tried to argue, we can learn about ‘typical’ agency and wander in the direction of ‘the margins’ insofar as there might be facts about human agency, such as its socially embeddedness, that we can see more clearly in cases involving disability. For instance, once we see that human agency is socially embedded, we can work to provide ecological structuring and social scaffolding that can lead to better expressions of human agency. (For examples of ecological structuring and social scaffolding, see Timpe 2019, particularly section 2.1.)

Finally, it’s important to note that we not overly associate disabilities with challenges to successful agency. As indicated above, a wide range of disabilities can have this kind of impact. But it’s also the case that some disabilities can make a range of agential behaviors, in the sense spelled out in section 1, easier. For instance, some individuals with certain forms of autism spectrum disorders can have heightened focus and an increased range of executive function tasks, as well as increased sensitivity with respect to vision, hearing, or touch—all of which can impact the agent’s behavior (see Crane and Goddard 2009). Similarly, the increased emotional attention and sensitivity has been found in individuals with Williams Syndrome (Niccols *et al.* 2012). Further attention needs to be paid to these sorts of impacts as well so that we don’t reinforce the problematic stereotypes of disabilities

References:

- 2p15p16.1 Microdeletion Syndrome*. 2014. Surrey, England: Rare Chromosome Disorder Support Group.
- Ardal, Pall S. 1993. “Depression and Reason.” *Ethics* 103: 540—550.
- Barnes, Elizabeth. 2016. *The Minority Body: A Theory of Disability*. Oxford: Oxford University Press.
- Berenbaum, Sheri A., Richard Abrams, Samuel Rosenberg, and Michael Alan Tylor. 1987. “The Nature of Emotional Blunting: A Factor-Analytic Study.” *Psychiatry Research* 20: 57—67.
- Berger, Ronald J. 2013. *Introducing Disability Studies*. Boulder, CO: Lynne Rienner Publishers.
- Bird, Geoffrey and Richard Cook. 2013. “Mixed Emotions: The Contribution of Alexithymia to the Emotional Symptoms of Autism.” *Translational Psychiatry* 23.3: 10.1038/tp.2013.61.

- Bird, Geoffrey, Giorgia Silani, Rachel Brindley, Sarah White, Uta Frith, and Tania Singer. 2010. "Empathic Brain Responses in Insula are Modulated by Levels of Alexithymia but Not Autism." *Brain* 133.5: 1515—1525.
- Buntinx, Wil H. E. 2014. "Understanding Disability: A Strengths-Based Approach," in *The Oxford Handbook of Positive Psychology and Disability*, ed. Michael L. Wehmeyer. Oxford: Oxford University Press: 7—18.
- Burack, Jacob A., Natalie Russo, Heidi Flores, Grace Iarocci, and Edwards Zigler. 2012. "The More You Know the Less You Know, But That's OK: Developments in the Developmental Approach to Intellectual Disability," in *The Oxford Handbook of Intellectual Disability and Development*, ed. Jacob A. Burack, Robert M. Hodapp, Grace Iarocci, and Edward Zigler. Oxford: Oxford University Press: 3—10.
- Carlson, Licia. 2010. *The Faces of Intellectual Disability: Philosophical Reflections*. Indiana University Press: Bloomington, MA.
- Caton, Hiram. 1986. "Pascal's Syndrome: Positivism as a Symptom of Depression and Mania," *Zygon* 21.3: 319—351.
- Clifton, Shane. 2018. *Crippled Grace: Disability, Virtue Ethics, and the Good Life*. Waco, TX: Baylor University Press.
- Coates, D. Justin and Philip Swenson. 2013. "Reasons-responsiveness and Degrees of Responsibility," *Philosophical Studies* 165.2: 629—645.
- Crane, L., L. Goddard, and L. Pring. 2009. "Sensory Processing in Adults with Autism Spectrum Disorders," *Autism* 13: 215-228.
- DeVidi, David. 2013. "Advocacy, Autism and Autonomy," in *The Philosophy of Autism*, ed. Jami L. Anderson and Simon Cushing. Bloomington, IN: Indiana University Press, 187-200.
- Donaldson, Ivan, C. David Marsden, Susanne A. Schneider, and Kailash P. Bhatia. 2012. *Marsden's Book of Movement Disorders*. Oxford: Oxford University Press.
- Hancarova, Miroslava, Martina Simandolva, Jana Drabova, Katrin Mannik, Ants Kurg, and Zdenek Dedlcek. 2013. "A Patient with De Novo 0.45 Mb Deletion of 2p16.1: The Role of BCL11A, PAPOLG, REL, and FLJ16341 in the 2p15-p16.1 Microdeletion Syndrome." *American Journal of Medical Genetics, Part A* 9999: 1—6.
- Iarocci, Grace and Stephen A. Petrill. 2012. "Behavioral Genetics, Genomics, Intelligence, and Mental Retardation," in *The Oxford Handbook of Intellectual Disability and Development*, ed. Jacob A. Burack, Robert M. Hodapp, Grace Iarocci, and Edward Zigler. Oxford: Oxford University Press: 13—29.

- Kahane, Guy and Julian. Savulescu. 2009. "The Welfarist Account of Disability," in *Disability and Disadvantage*, ed. Kimberley Brownlee and Adam Cureton. Oxford: Oxford University Press, 14—53.
- Kasari, Connie L., Laudan B. Jahromi, and Amanda C. Gulsrud. 2012. "Emotional Development in Children with Developmental Disabilities," in *The Oxford Handbook of Intellectual Disability and Development*, ed. Jacob A. Burack, Robert M. Hodapp, Grace Iarocci, Edward Zigler. Oxford: Oxford University Press: 239—253.
- Kennett, Jeanette. 2001. *Agency and Responsibility: A Common-Sense Moral Psychology*. Oxford: Oxford University Press.
- Kim, Cynthia. 2015. *Nerdy, Shy, and Socially Inappropriate: A User Guide to an Asperger Life*. London: Jessica Kingsley Publishers.
- Kittay, Eva Feder. 1998. *Love's Labor: Essays on Women, Equality, and Dependency*. New York: Routledge.
- Lloyd, Kenneth G., Oleh Hornykiewicz, Lynne Davidson, Katherine Shannak, Irene Farley, Menek Goldstein, Masato Shibuy, William N. Kelley, and Irving H. Fox. 1981. "Biochemical Evidence of Dysfunction of Brain Neurotransmitters in the Lesch-Nyhan Syndrome," *The New England Journal of Medicine* 305. 19, 1106—1111.
- MacIntyre, Alasdair. 1999. *Dependent Rational Animals: Why Human Beings Need the Virtues*. Peru, IL: Carus Publishing Company.
- Mendez, Mario F., Aaron McMurtray, Eliot Licht, Jill S. Shapira, Ronald E. Saul, and Bruce L. Miller. 2006. "The Scale for Emotional Blunting in Patients with Frontotemporal Dementia." *Neurocase* 12: 242—246
- Nelkin, Dana. 2014. "Difficulty and Degrees of Moral Praiseworthiness and Blameworthiness," *Nous* 50.2: 356—378.
- Niccols, Alison, Karen Thomas, and Louis A. Schmidt. 2012. "Socioemotional and Brain Development in Children with Genetic Syndromes Associated with Developmental Delay," in *The Oxford Handbook of Intellectual Disability and Development*, ed. Jacob A. Burack, Robert M. Hodapp, Grace Iarocci, and Edward Zigler. Oxford: Oxford University Press, 254—274.
- Proust, Joëlle. 2013. "Mental Acts," in *A Companion to the Philosophy of Action*, ed. Timothy O'Connor and Constantine Sandis. Wiley-Blackwell: Malden, MA. 209—217.

- Ricciardi, Lucia, Benedetta Demartini, Aikaterini Fotopoulou, and Mark J. Edwards. 2015. "Alexithymia in Neurological Disease: A Review." *The Journal of Neuropsychiatry and Clinical Neurosciences* 27.3: 179—187.
- Roberts, John Russell. 2001. "Mental Illness, Motivation and Moral Commitment," *Philosophical Quarterly* 51.202: 1—59.
- Shakespeare, Tom. 2014. *Disability Rights and Wrongs*, 2nd ed. London: Routledge.
- Shoemaker, David. 2015. *Responsibility from the Margins*. Oxford: Oxford University Press.
- Silberfeld, Michel and David Checkland. 1999. "Faulty Judgment, Expert Opinion, and Decision-Making Capacity," *Theoretical Medicine and Bioethics* 20: 377—393.
- Smith, Will. 2017. "Agency and Practical Abilities." *Royal Institute of Philosophy Supplement* 80: 235—264.
- Timpe, Kevin. 2016. "Executive Function, Disability, and Agency." *Res Philosophica* 93.4: 767—796. first Res Phil
- Timpe, Kevin. 2019. "Moral Ecology, Disabilities, and Human Agency," *Res Philosophica*.
- Timpe, Kevin. Forthcoming. "Denying a Unified Concept of Disability."
- UPIAS. 1976. "The Union of the Physically Impaired Against Segregation and Disability Alliance discuss Fundamental Principles of Disability." London: The Disability Alliance.
- Vargas, Manuel. Forthcoming. "Less than Fully Responsible: Difficulty and Degrees in Shared and Mitigated Responsibility."
- Weiner, William, Lisa Shulman, and Anthony E. Lang. 2001. *Parkinson's Disease*. Baltimore, MD: The Johns Hopkins University Press.
- WHO. 2010. "Definition: Intellectual Disability." <http://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/news/news/2010/15/childrens-right-to-family-life/definition-intellectual-disability>
- Williamson, Peter C. and John M. and Allman. 2011. *The Human Illness: Neuropsychiatric Disorders and the Nature of the Human Brain*. Oxford: Oxford University Press.

¹ My own skepticism of top-down approaches can be found in Timpe forthcoming. See also Barnes 2016: 3. Barnes isn't committed to the claim that there isn't a unified category of disability. Rather, on her view the mere fact that we use the word 'disability' with this range of modifiers doesn't entail that there is.

² It is common to differentiate physical disabilities from, among other categories, intellectual disabilities. But the vast majority of the over 1000 known etiologies associated with intellectual disability have physical consequences. Many intellectual disabilities are caused by genetic abnormalities; even environmental causes, what they cause is changes in various bodily systems (e.g., lead ingestion, which is estimated to be the cause of approximately 10% of intellectual disability worldwide). Demarking physical disabilities from other subtypes is, in my view, significantly more vexed than often admitted.

³ According to Moss, Howlin, Oliver: "the diagnostic criteria outlined by the DSM-IV-TR (APA; 2000) and OCD-10 (WHO, 1992) manuals may not be sensitive enough to distinguish between individuals who have not yet attained the appropriate level of development required to demonstrate a particular skill and those who show a genuine impairment in those skills" (Moss 2012, 293). For a discussion of criticisms of the WHO's approach to defining intellectual disability, see Buntinx 2014.

⁴ In the introduction to their *Cognitive Disability and Its Challenge to Moral Philosophy*, Licia Carlson and Eva Feder Kittay write that "We've chosen the term 'cognitive disability,' under which we include conditions like autism, dementia, Alzheimer's, and [what has historically been called] mental retardation, rather than 'intellectual disability.' The former is broader. Also, some forms of cognitive disability do not imply diminished intellectual capacity (e.g., autism)" (Carlson and Kittay (2010), 1 note 1. See also Carlson (2010)). My interest here is specifically with intellectual disability, though the exact relationship between the two is complex. Furthermore, the distinction between them is not always held.

⁵ The history of IQ tests in general and specifically with their role in evaluating intellectual disability is contested; see Harris 2006, particularly chapters 2 and 3.