Affording autistic persons epistemic justice

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Abstract: Autism is a psychopathological condition around which there is still much prejudice and stigma. The discrepancy between third-person and first-person accounts of autistic behavior creates a chasm between autistic and neurotypical (non-autistic) people. Epistemic injustice suffered by these individuals is great, and a fruitful strategy out of this predicament is much needed. I will propose that through the appropriation and implementation of methods and concepts from phenomenology and ecological-enactive cognitive science, we can acquire powerful tools to work towards greater epistemic justice for autistic individuals. I will use the resources found in the skilled intentionality framework, integrated with various phenomenological theories. From these approaches, we can view autistic impairments and disability relationally and how epistemic enablement and disablement form. Phenomenology and its methods help us learn more about the perceptual and social experiences of autistic individuals. The voices of the autistics themselves will be of the greatest importance here. I will show that, through restructuring our landscape of affordances and with a greater phenomenological understanding of the autistic inner world, we can devise new strategies that afford greater epistemic enablement and epistemic justice.

Keywords: autism spectrum disorder, epistemic injustice, phenomenology, enactivism, ecological psychology, landscape of affordances

"I stim, therefore I am"
Melanie Yergeau

1. Introduction

Autistic people face many injustices. A recent horrifying event that has befallen an autistic person testifies to the profound lack of people's understanding of autistics. On May 20, 2020, a 32-year-old autistic Palestinian man, Eyad al-Hallaq, after being mistaken for a terrorist, was shot and killed by the Border Police on his way to a special needs school that he attended in Jerusalem.[2]

Even when prejudices towards autistic people are not that extreme, there seems to be a common belief that autistic people are inherently asocial (lacking sociability). Autistics have raised their voices against such qualifications (or prejudices). They have put forward the idea of *the double-empathy problem*, claiming that the difficulties in social interaction and communication between autistic and non-autistic (or *neurotypical*, as some autistics call non-autistics) people are a two-way issue (Milton, 2012). These stem from autistic phenomenology. The novel ideas about autism that come from autistic people themselves are integral to the neurodiversity movement that has played a crucial part in changing the perception of ASD in recent times. This raises the problem that autism is misrepresented and shows a lack of

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[2] More about this case study can be found in Bader & Fuchs (2022).

autistic personal voices being heard both in autism research and by the general public. These individuals are thus victims of *epistemic injustice*, and their epistemic agency is being neglected or thwarted.

In the current iteration of The Diagnostic and Statistical Manual of Mental Disorders (DSM-5), autism (autism spectrum disorder or ASD) is understood as a neurodevelopmental disorder which is characterized by deficits in social interaction and social communication (i.e., deficits in social-emotional reciprocity, nonverbal communicative behaviors) and repetitive patterns of behavior, restricted interests and activities (i.e., stereotyped or repetitive motor movements, insistence on sameness, highly restricted, fixated interests, hyper- or hyporeactivity to sensory input) (APA, 2013, p. 50). A common criticism of the DSM heard in modern times seems to be especially appropriate in the case of autism spectrum disorder. There is little or no mention of the first-person phenomenology of autistic persons. The philosophical and psychiatric understanding of ASD has changed since Kanner's and Asperger's time.[3]

Cognitivist models, like central coherence (agents give more attention to details than to global information, Happé, 1999; Happé & Frith, 1996) and mindblindness (autistic individuals fail to develop the capacity to mind-read or "mentalize", it is claimed, and lack the ability to understand mental states, hence mindblind; Baron-Cohen, 1995; Frith, 2003) were the first. Enactive and embodied accounts revolutionized how we understand cognition and autism (De Jaegher, 2013; Maiese, 2021; Krueger, 2021; Krueger & Maiese, 2018). Contemporary phenomenological accounts have emphasised that differences in autistic perception and interaction are to be sought on the pre-reflective level (Zahavi & Parnas, 2003; Bizzari, 2018; León, 2019). Along the way, and in synthesis with enactive approaches, predictive coding/processing explanations have also been put forward (Van de Cruys et al., 2014; Schilbach, 2016; the dialectical misattunement hypothesis, Bolis et al., 2017; Constant et al., 2018).

I will proceed in the following way. Section 2 will define epistemic injustice and how different kinds of inequities are inflicted upon autistic persons. In the same section, I thematize Catala et al.'s (2021) relational account of epistemic agency based on enactivism (Section 3). I take this approach as a starting point and extend it with the ecological perspective to arrive at an account of epistemic injustice in ASD within the ecological-enactive framework (Section 4). In Section 5, I discuss how to employ this integrative framework, together with phenomenology, to study autistic experience and get a better understanding of the autistic style of interaction and norms. In the end, these strategies could help fight epistemic injustice in autism, I will argue.

2. Epistemic injustice in autism

The kind of injustice that is markedly epistemic in nature, *epistemic injustice* consists of "a wrong done to someone specifically in their capacity as a knower" (Fricker, 2007, p. 1). These can refer to various mistreatments "that relate to issues of knowledge, understanding, and participation in communicative practices" (Kidd, Medina & Pohlhaus, 2017, p. 1). These unjust treatments of knowers can take the forms of exclusion, invisibility, misrepresentation, being instrumentalized and marginalized, and distrusted, to name just a few (Kidd, Medina & Pohlhaus,

[3] It was recently revealed (Sher & Gibson, 2021) that the Soviet-Russian psychiatrist Grunya Efimovna Sukhareva gave the first clinical account of autistic children long before Kanner and Asperger. Her descriptions of autistic traits in six boys (between 2 and 14 years of age) from the 'hospital-school' at the Psychoneurological Department for Children in Moscow were published in a German journal in 1926.

2017). Miranda Fricker has distinguished two kinds of epistemic injustice in her work: testimonial injustice and hermeneutical injustice (Fricker, 2003, 2007). Testimonial injustice is inflicted when a hearer, due to prejudice and bias, reduces the credibility of the speaker's testimony. Hermeneutical injustice comes on a more collective level (and at a prior stage) than testimonial injustice concerning participation in the process of production of knowledge. When there are "gaps in collective hermeneutical resources", one is disadvantaged in that her social experience will be hard to communicate because of those gaps in the collective/mainstream hermeneutical resources (Fricker, 2007, p. 1; Dinishak, 2021, p. 2).

Dinishak argues that there is a distinct form of hermeneutical injustice at work in the case of autism, one that concerns knowledge production, i.e. autistic autobiographies. It appears that their own first-personal accounts of autistic experience are being neglected in the formation of concepts about such experience. Using Hacking's work, she starts with considerations of the difficulties both autistics and neurotypicals face when they try to understand the behavior and experiences of one another. Hacking (2009) calls it the lack of "Köhler's phenomena"[4] in the two-way interaction and mutual understanding of autistics and neurotypicals. That is, both groups lack non-inferential, unmediated access to the mental states of the other (concept of *direct perception* in modern debates, Krueger & Overgaard, 2012). The behavior of the autistic seems completely "alien" to the observing neurotypical (and the same stands for autistic people, for example, Temple Grandin calls herself an anthropologist on Mars).

Now, the neurotypical is an age-old language used to describe their experiences, and the same could not be said about autistics; the language that will adequately describe their experiences, helping autistics themselves understand their own experience and communicate these experiences to neurotypicals, is still missing. That kind of language is now in the making, and one way to contribute to this language creation is through autistic autobiography. This is the crucial point at which autistics suffer hermeneutical injustice and hermeneutical marginalization, as Dinishak argues. Autistic people's contributions to language and concept formation that describe their own experiences are still being neglected (Dinishak, 2021, p. 9). They are retooling and improving everyday language and "expert" language used to explain autistic behavior. Autistic biographies could help neurotypical people gain some insight into autistic experiences. This way, glimpses into the social life of autistics and "neurodivergent intersubjectivity" (Heasman & Gillespie, 2019) could be achieved.[5]

Now, focusing solely on autistic persons that are verbal and able to express their experiences would exclude a wide population of non-verbal autistics (many autistic children), which is something Dinishiak is aware of and highlights in her paper (2021, p. 12). Falling to include autistic individuals with whom autism researchers do not "share a common verbal mode of communication" and those who are nonspeaking would also be a kind of epistemic injustice (Hens, Robeyns & Schaubroeck, 2018). Testimonial and hermeneutical injustices again rear their ugly heads in these cases, particularly testimonial injustice. Now, the problem is how to get insight into the autistic experience when it comes to those who only rely on nonverbal modes of communication.

[4] Comes from Gestalt psychologist Wolfgang Köhler who pointed out expressive movements and practical behavior are, most of the time, "a good picture" of people's inner life (Köhler, 1929, p. 250).
[5] Victoria McGeer has pointed out that autistic testimonies are too often dismissed as unreliable (Boldsen, 2022; McGeer, 2005).

Lucienne Spencer, in a recent paper (Spencer, 2022), builds a case that the current definition of testimonial (in)justice should be expanded to include other forms of communication, both verbal and nonverbal. Spoken and written language difficulties are characteristic of neurocognitive disorders - intellectual disabilities, according to DSM-5, such as autism and late-stage dementia. Spencer argues that such individuals are subject to epistemic harm in the form of testimonial injustice, although they communicate non-verbally. She names this *non-verbal testimonial injustice* and uses dementia as a case study. Spencer adds autistic people (at least those that are non-verbal) as a population vulnerable to this kind of epistemic injustice (Spences, 2022, p. 6). Any ways of non-verbal communication are usually overlooked and disregarded when it comes to autistic behavior, and only close family members or carers see and understand such attempts to communicate. An autistic child's peculiar movements and gestures could be trying to convey an emotion or a desire, but only the parents would perhaps understand its meaning. Spencer employs a phenomenological framework drawn from Merleau-Ponty's (2012) work to argue that non-verbal expressions (embodied gestures) are a meaningful form of communication. She broadens Miranda Fricker's idea of "testimonial sensibility" to "communicative sensibility" to include our ability to register other people's gestures as "epistemically loaded" (2022, p. 5).

Catala et al. warn that epistemic injustices to autistics are based on neuronormativity and neurotypical ignorance, and from this comes a specific kind of oppression. They focus on epistemic injustice that autistic people suffer from neuronormative/neurotypical biases about autistic sociability. Persuasively they argue for connections between testimonial and hermeneutical injustices and how they produce one another. Who appears as a credible knower affects who will be involved in the meaning-making. Who appears to be intelligible will influence who is viewed as credible, and so on. To argue for this, they show that there is conceptual and expressive hermeneutical injustice and find five types of epistemic injustices in this regard: "systematic testimonial injustice; preemptive testimonial injustice or quieting; testimonial smothering; contributory hermeneutical injustice; and expressive hermeneutical injustice" (Catala, Faucher, & Poirier 2021, p. 9017). There are no adequate conceptual tools and proper terms to capture the experience of a certain group in the mainstream hermeneutical resources, in this case, autistics, and their experience is unintelligible; they cannot be understood. When conceptual and terminological developments have been made by a certain group (autistics have developed a new language and concepts suitable for their experience), but their contribution is neglected, they are subject to contributory hermeneutical injustice (Dotson, 2012; Catala, Faucher, & Poirier, 2021, p. 9020).

In order to understand how epistemic injustice comes about and how to deal with it, Catala et al. introduce an important idea (which comes from an examination of autistic testimonials) that epistemic agency is a "fundamentally dynamical and relational process" (2021, p. 9022) as opposed to the internalist picture. This process involves not just the individual but other agents and the sociomaterial environment. According to them, epistemic injustice comes from neuronormativity and neurotypical ignorance. These types of identification force them to understand epistemic agency in this relational way. But the relational account of epistemic agency can also help us find ways to achieve greater epistemic justice.

While tracing the historical origins of the idea that agency can be dependent on the environment, authors eventually come to Varela, Thompson and Rosch's enactivism (*The Embodied Mind,* Varela et al., 1991). It is no surprise that Catala et al. turn to a different

understanding of cognition to support their idea of epistemic agency as relational. In the end, they defend an enactive theory of epistemic agency that is in line with autistic experiences (Catala, Faucher, & Poirier, 2021, p. 9025). Let us unpack what this means.

3. Enactive solution

Enactivism, as a research programme, came about under the influence of ideas from biology, cognitive science and phenomenology of Merleau-Ponty (Thompson, 2007). Integrating these perspectives was the goal from the beginning (e.g., neurophenomenology, Varela, 1996). As opposed to the doctrine of cognitivism (mind/consciousness operates much like a computer with representations, and there is a clear divide between the inner and the outer world), enactivism understands cognition as embodied action that is not enclosed in the brain (or the organism that has it). The organism and the environment are dynamically coupled, making up a dynamical system. There is a "brain-body-environment" system to be accounted for, and the organism produces meaning in the world through the process of sense-making. Every live organism has consciousness, according to enactivists (*life-mind continuity thesis*; Di Paolo, 2009; Thompson, 2007). The organism's environment is meaningful; it is its ecological niche (nem. *Umwelt*; von Uexküll, 1909). One of the main tenets of enactivism is that sensory and motor processes are indivisible, entangled, perception and action in a circle.

Every type of cognition can be viewed through the enactivist lens, not just perception but intersubjectivity or social cognition (Di Paolo & De Jaegher, 2007), affectivity, and language, cognition of both the lower and higher forms. In addition, enactivism has been applied to psychiatry and psychopathology, de Haan, 2020; Maiese, 2016; for autism De Jaegher, 2013; Klin, Jones, Schultz, & Volkmar, 2003; for schizophrenia Kyselo, 2016).[6] The work of Saneke de Haan (2020) is of particular importance, given she expounds the most detailed and worked-out form of an enactive approach to psychiatry and understanding of psychiatric disorders.

In their enactive account, Catala et al. include ideas and concepts from the work of Rietveld and Kiverstein - the notions of the *landscape and field of affordances* (Bruineberg & Rietveld, 2014), as well as that of *mental institutions* (Krueger & Maiese, 2018). Both of these ideas heavily rely on the concept of affordance from the ecological psychology of Gibson (1979). Since the epistemic agency is relational, it would lead us to understand autism not as an individualistic condition but as one that comes about in the relationship between autistic people (and their norms) and neurotypical people (and their norms). Catala et al. here draw on Gallagher̀s and Krueger and Maieseès notion of neurotypical mental institutions. Authors argue that such a mental institution with its neurotypical "norm-governed practices, artefacts and traditions" (Krueger & Maiese, 2018, p. 10) sets up its own affordance landscape that is different from the affordance landscape of autistic people (the one they skillfully engage in). Now, the problem comes from the mismatch between neurotypical and autistic landscapes (and corresponding "institutions"). Autistics do not attune to neurotypical norms and the *epistemic disablement* of autistic people comes from this, as Catala et al. (2021, p. 9026) argue.

[6] I review the philosophical literature on enactive approaches to psychiatry and its combinations with ecological psychology in a different paper, Nešić (2022).

4. Ecological-enactive remedy

Since the problem of epistemic injustice and disablement comes down to the differences between neurotypical and autistic people that involve the ecological aspect (affordance landscape), it seems only natural that the enactivist account should be expanded with ecology (the famous fifth E in 4E approaches). Therefore, I think the best framework to understand epistemic injustice (and ASD more generally) is the *ecological-enactive* framework. I will use a particular EE framework - the *skilled intentionality framework* or the SIF (Rietveld, Denys, & van Westen, 2018). SIF combines embodied, enactive and ecological research programs and views cognition as skilled engagement with affordances (possibilities for action) in the sociomaterial environment, and this is how an individual tends toward the optimal grip. Part of SIF is an ecological-enactive interpretation of the free energy principle and predictive processing (Bruineberg & Rietveld, 2014).

According to SIF, members of the same species are situated within the same ecological niche, e.g., the human ecological niche. It is a rich *landscape of affordances*. These affordances correspond to the abilities available in a particular *form of life*.[7] Skilled intentionality is responsiveness to a landscape of affordances (which are relational). The landscape contains all the affordances that are available to a form of life in general (humans). These include social affordances. On the other hand, the *field of affordances* "reflects the multiplicity of inviting possibilities for action for an individual in a concrete situation" (Rietveld, Denys, & van Westen, 2018, p. 52; de Haan et al., 2013). A field of affordances is an individual "subset" of the whole landscape of affordances.

I find this delineation of totally separate landscapes of affordances of neurotypicals and autistics troublesome. This will depend on how we understand landscapes, but if we follow the ecological-enactive theory of Kiverstein and Rietveld, I think it would be wrong to posit several landscapes of affordances - there is one landscape of the human species. That said, the field of affordances of the autistic is different. Mental institutions are a useful concept and could be located somewhere between the landscape and the field of affordances. Gallagher (2018) himself acknowledges that his affordance space falls between field and landscape. Perhaps, when these authors say there are different affordance landscapes, they are just being imprecise.

Staying true to this distinction (field-landscape) and the claim that there is one landscape, and following the ecological-enactive approach, I find it useful to view autistic persons as having a different field of relevant affordances. Given that there are three dimensions to the field of affordances: width ("broadness of the scope of affordances"), depth (in terms of temporality), height (salience or "intensity of the relevance") (de Haan et al., 2013; de Haan, 2020), it can be said that autistic people have narrow fields, with shallow temporal depth, and with great affective salience of the affordances that solicit them in the field.

Similarly to Gallagher's notion of "disaffordances", Catala et al. introduce concepts of epistemic enablement and disablement. Epistemic disablement comes from the interactionist model of disability, saying that the disability stems from the discrepancy between the capacities of the individual and environmental conditions that can be resources or obstacles (Catala et al. 2021, p. 9029). So factors or elements of the environment can hinder or enable certain capacities and, thus, be enabling or disabling (e.g. cultural norms). In their words, "epistemic disablement, a

[7] Rietveld and Kiverstein (2014) follow the Wittgensteinian (1953) notion of affordances. With the form of life they refer both to the kind of an animal (with an ecological niche) and to the sociocultural practices.

process that effectively removes the possibility for an individual or a group of individuals to engage in fair epistemic interactions and to successfully make fruitful epistemic contributions" (2021, p. 9031).

This is in line with the enactivist approach, but since they want to understand environmental influences, adding the ecological aspect to the enactive perspective would make more sense, that is to view the problem from the ecological-enactive approach.[8] The SIF defenders also propose an Ecological-Enactive *model of disability* (Toro et al., 2020), which emphasizes the role of a pragmatically structured sociomaterial environment in constraining and enabling behavior. Unlike the medical and social models, this model focuses on the experience of the lived body of the disabled person.

Catala et al. view enactivism as an epistemic enabler. Other ways of enabling include participatory research. The ecological-enactive approach that builds on enactivism and phenomenology would bring even more epistemic enablement. Epistemic enablement is needed to get to greater epistemic justice. Catala et al. note that enactivism enables getting to the cause of epistemic disablement, enabling greater epistemic injustice. I think that a better fit is the ecological-enactive perspective since it explicitly and in a detailed manner considers the environmental aspects. So, I defend an ecological-enactive account of epistemic injustice in ASD. From the ecological-enactive framework, we have a better perspective on what can be epistemically enabling for autistic individuals. Since the ecological-enactive framework is integrative and connects enactivism, ecological psychology and phenomenology, findings and strategies from all these disciplines can be of help.

5. Towards epistemic justice

In this section, I would like to discuss some strategies that can lead to greater epistemic enablement and justice for autistic people, given all that has been discussed so far. Spencer, in her work, has shown how phenomenology can be used to get a better understanding of non-verbal forms of communication and how they might appear in disabled people. Phenomenology can contribute to the debate surrounding epistemic injustices by exploring autistics' first-person and second-person experiences. So, in order to arrive at some strategies for greater epistemic justice, phenomenology seems like an invaluable tool. Boldsen (2021) uses a phenomenological framework based on Merleau-Ponty, which encompasses material objects and surroundings to analyze autistic social experiences and the specificity of autistic intersubjectivity. These approaches are further nicely aligned with ecological and enactive perspectives on autism. Boldsen shows that in autism, we find a different kind of intersubjectivity in which interactions include material spaces as well as bodies.

Catala et al. note similarly that in the case of non-verbal autistic persons and children and those with other intellectual disabilities, the enactivist approach can contribute to a deeper understanding of the movements and expressions of those individuals and so to the illumination of their experience (2021, p. 9034). I agree with this, and this is what participatory research built on enactivist and phenomenological foundations has been able to achieve.

[8] Integrating these two approaches to cognition is not an easy endeavour. While the enactivist have criticised Gibson's ecological theory of perception as one-sided (on the side of the environment), the ecologists pointed out that fot the enactivist environment has no meaning. See more about this in (Toro et al., 2020, p. 2).

For example, the psychiatric term “stereotypy” in DSM-5 designates those repetitive motor movements, like hand-flapping, finger flicking, and whole-body rocking movements (also called “self-stimulatory behaviors”). These behaviors are deemed problematic and are up for suppression and possible elimination in therapy. Now, autistics themselves have been outspokenly critical of how these types of behavior are seen and understood. They use terms like “stims”/“stimming” and “loud hands” to describe such behavior (Bascom, 2012; Kapp et al., 2019). Neurodiversity activists and autistics oppose eliminating these types of non-harmful behavior and point out that they can be seen in some instances as non-verbal means of communication. Different ways of stimming can be expressive and communicative (Bascom, 2012).

The DSM-5 has brought with it the collapse of Asperger's syndrome and autism spectrum disorder[9], and this had a negative impact on all people who identified as “Aspies” and caused a ripple in the community surrounding the diagnosis (Scrutton, 2017; Giles, 2014). The patients themselves (autistic people) have not been involved or participated in defining their experience and their condition, so the diagnosis, once again, came from a third-person perspective. First-person accounts have been neglected in this discriminatory distribution of epistemic credibility.

As Catala et al. (2021) note, participatory research furnishes epistemic enablement. Others (Leary and Donnellan, 2012, p. 51) have argued that stims could be “effective ways of managing incoming sensory flows". Autistic habits of mind like self-stims have a “norm-governed character” (Krueger, 2021). De Jaegher has pointed out that there is evidence that activities like repetitive behaviors (“autistic sensorimotor and affective particularities”) are connected to pleasure and well-being, though they may be seen as socially unacceptable. They are “beloved activities apparently associated with great positive valence” (Klin et al., 2007, p. 97; cited in De Jaegher, 2013, p. 10). This can be witnessed in the qualitative interviews conducted by Mercier et al. (2000; cited in De Jaegher, 2013). Such activities can have salience and relevance for autistic persons, which should be considered when dealing with the behavior - there is a possibility of “converting them into acceptable activities" rather than trying to extinguish them altogether (Krueger & Maiese, 2018, p. 27; Boyd, McDonough, & Bodfish, 2012).

Certainly, there are methodological problems with how to conduct interviews with autistics. This would seem almost impossible in the case of autistic children, who are often non-verbal. Methodological advances from 4E cognitive science and phenomenology can be epistemically enabling. Participatory research and phenomenological, semi-structured interviews provide for second-person methodologies and approaches to autistic experience that can directly include autistic individuals in the process of knowledge collection and production. Involving autistic persons in interviews, the most direct and precise tools for phenomenological data collection (see Henriksen et al., 2021), proves to be particularly difficult. For autistics to properly engage with the interviewer and supply fruitful feedback, the interview has to be set up to be conducted in special ecological and dialogical circumstances.

Consider the work of Sofie Boldsen (2022). To investigate disturbances of social experience and social interaction in autism, she uses empirical, phenomenological methods of the interview and participatory observation, working in groups with high-functioning autistics. These methods presuppose the use of the second-person perspective. Approaching the social

[9] DSM-5 (2013) diverges from the fourth iteration in that it integrates previously separate categories of autistic disorder, Asperger syndrome, pervasive developmental disorder - not otherwise specified, and childhood disintegrative disorder into one consolidated umbrella diagnosis of autism spectrum disorder.

experiences of autistics in this way and engaging with such experience head-on in group interactions is an invaluable way to work towards greater epistemic justice for autistic people. Similarly, participatory research conducted by enactivist such as Thomas Fuchs and Hanne de Jaegher (De Jaegher et al., 2017), in practical or empirical phenomenology through the PRISMA method ("the systematic unfolding of interactive experience"), enables us to get a better understanding of interactive experience in autism. Taking into account autistic first-person and second-person experience (as well as the second-person experience of those who engage with autistic persons) is a good remedy for epistemic injustice.

Phenomenological and enactivist accounts have stressed that we need to understand autism as a relational, "two-way phenomenon" (Krueger & Maiese, 2018), that it is not just an individual's disorder but unfolds dialectically between a person and her sociomaterial environment (Boldsen, 2022, p. 204). Among the phenomenological strategies which help in the fight against epistemic injustice, we can now add those that come from the ecological understanding of autism. From the perspective of the skilled intentionality framework, which I find to be the most encompassing and useful one, greater epistemic justice for autistic people can be brought about through inclusive, relational changes in the landscape of affordances. Restructuring the landscape to include more appropriate affordances for autistics would allow them to feel less disabled and be able to search for and develop new skills. Since many problems for autistics come from sensory overload in the environment, for example, we (the neurotypicals) can make changes to the affordances in order to accommodate their field. This way, autistic people would be in a position to attune better to our norms and practices phenomenally.

We can get to greater enablement by designing more attractive landscapes of affordances that could promote actions from autistic people (e.g., with the arrangement of "place-affordances"). We can predict and reorder the available affordances of a particular place (as if in an art installation) to generate behavioral change in autistic subjects (see about the usefulness of the notion of *field of promoted actions,* Reed & Bril, 1996; Bruineberg et al., 2021, pp. 12834-36). The mismatch in norms between autistics and non-autistics (neurotypicals) can lead to epistemic disablement, as Catala et al. warn. However, since the disorder on the whole (and the disablement that comes with it) is constituted relationally from our side, we can work to make the sociomaterial environment more open and flexible for attunement to autistic norms.

6. Conclusion

Too often, autistic persons (especially children on the spectrum) are prejudicially discounted by neurotypicals and characterized as "not knowing anything", lacking any skills, and not being able to fit in the community. In this paper, I tried to hint at possible strategies that would be helpful in fighting epistemic injustice in autism. I endeavoured to do this by building on a recent account of epistemic injustice, that of Catala et al. (2021). They develop a relational account of epistemic agency in enactivist terms. In their account of epistemic agency, the epistemic injustice comes from neuronormativity and neurotypical ignorance, but they tried to show how enactive ways of epistemic enablement can be achieved. I aimed to argue how this framework for understanding epistemic agency and (in)justice can and should be extended by considering the ecological aspect of cognition. The appropriate encompassing framework for the task is an ecological-enactive one, the skilled intentionality, as I contended. With the ecological dimension of cognition added to the enactive one, and through notions of the field and landscape

of affordances, we could see how disability (and epistemic disablement) can arise and be in a better position to find new ways to support epistemic enablement. I then argued that phenomenology, with its concepts and methods (interview and participatory observation) and as an integral part of the ecological-enactive framework, can be helpful in bringing epistemic justice to autistic people. Both phenomenological and participatory research on autism could contribute. These are all valuable strategies through which neurotypicals can eliminate prejudice against autistic people and bring greater epistemic justice for these individuals.

References

American Psychiatric Association (2000). *Diagnostic and statistical manual of disorders (4th ed.).* Washington, DC: American Psychiatric Association.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th ed.).* Washington, DC: American Psychiatric Association.

Bader, O., Fuchs, T. (2022). Gestalt Perception and the Experience of the Social Space in Autism: A Case Study. *Psychopathology*, 55, 211-218. DOI: 10.1159/000524562.

Baron-Cohen, S. (1995). *Mindblindness: An Essay on Autism and Theory of Mind*. Cambridge, MA: MIT Press.

Bascom, J. (ed.) (2012). *Loud Hands: Autistic People, Speaking. Washington*, D.C.: Autistic Press.

Bizzari, V. (2018). Like in a Shell: Interaffectivity and Social Cognition in Asperger's Syndrome. *Thaumàzein*, 6, 158-179.

Boldsen, S. (2021). Social interaction style in autism: An inquiry into phenomenological methodology. *Journal of Phenomenological Psychology*, 52(2),157-192. https://doi.org/10.1163/15691624-12341389.

Boldsen, S. (2022). Material Encounters: A Phenomenological Account of Social Interaction in Autism. *Philosophy, Psychiatry, & Psychology,* 29(3), 191-208. doi:10.1353/ppp.2022.0039.

Bolis, D., Balsters, J., Wenderoth, N., Becchio, C., Schilbach, L. (2017). Beyond autism: Introducing the dialectical misattunement hypothesis and a Bayesian account of intersubjectivity. *Psychopathology*, 50(6), 355–72. https://doi.org/10.1159/000484353.

Boyd, B. A., McDonough, S. G., Bodfish, J. W. (2012). Evidence-Based Behavioral Interventions for Repetitive Behaviors in Autism. *Journal of Autism and Developmental Disorders*, 42(6), 1236–1248.

Bruineberg, J., Rietveld, E. (2014). Self-organization, free energy minimization, and optimal grip on a field of affordances. *Frontiers in Human Neuroscience*, 8, 1– 14.

Bruineberg, J., Seifert, L., Rietveld, E., Kiverstein, J. (2021). Metastable attunement and real-life skilled behavior. *Synthese*, 1–24. https://doi.org/10.1007/s11229-021-03355-6.

Catala, A., Faucher, L., Poirier, P. (2021). Autism, epistemic injustice, and epistemic disablement: a relational account of epistemic agency. *Synthese,* 199, 9013–9039, https://doi.org/10.1007/s11229-021-03192-7.

Constant, A., Bervoets, J., Hens, K. et al. (2018). Precise Worlds for Certain Minds: An Ecological Perspective on the Relational Self in Autism. *Topoi,* 39, 611–622 https://doi.org/10.1007/s11245-018-9546-4.

de Haan, S., Rietveld, E., Stokhof, M., Denys, D. (2013). The phenomenology of deep brain stimulation-induced changes in OCD: an enactive affordance-based model. *Frontiers in Human Neuroscience*, 7(653), 1– 14.
de Haan, S. (2020). *Enactive Psychiatry*. CUP
De Jaegher, H. (2013). Embodiment and sense-making in autism. *Frontiers in Integrative Neuroscience*, 7.
De Jaegher, H., Froese, T. (2009). On the role of social interaction in individual agency. *Adaptive Behavior,* 17(5), 444-460.
De Jaegher, H., Di Paolo, E. (2007). Participatory sense-making: An enactive approach to social cognition. *Phenomenology and the Cognitive Sciences*, 6 (4), 485–507.
De Jaegher, H., Pieper, B., Clénin, D. et al. (2017). Grasping intersubjectivity: an invitation to embody social interaction research. *Phenom Cogn Sci* 16, 491–523. https://doi.org/10.1007/s11097-016-9469-8.
Di Paolo, E. (2009). Extended life. *Topoi*, 28 (1), 9–21.
Dinishak, J. (2021). Autistic autobiography and hermeneutical injustice. *Metaphilosophy* 00, 1–14. https://doi.org/10.1111/meta.12514.
Dotson, K. (2012). A cautionary tale: On limiting epistemic oppression. *Frontiers*, 33(1), 24–47
Fricker, M. (2003). Epistemic Injustice and a Role for Virtue in the Politics of Knowing. *Metaphilosophy* 34, 1–2, 54–73.
Fricker, M. (2007). *Epistemic Injustice: Power and the Ethics of Knowing*. New York: Oxford University Press.
Frith, U. (2003). *Autism: Explaining the Enigma*. Hoboken, NJ: Wiley-Blackwell.
Fuchs, T. (2015). Pathologies of Intersubjectivity in Autism and Schizophrenia. *Journal of Consciousness Studies,* 22(1–2), 191–214.
Fuchs, T. (2019). The Interactive Phenomenal Field and the Life Space: A Sketch of an Ecological Concept of Psychotherapy. *Psychopathology,* 52, 67-74. DOI: 10.1159/000502098.
Gallagher S. (2018). The therapeutic reconstruction of affordances. *Res Philosophica*, 95(4), 719-736.
Gibson, J. J. (1979). *The ecological approach to visual perception.* Boston: Houghton Mifflin
Giles, D. (2014). 'DSM-V is taking away our identity': The reaction of the online community to the proposed changes in the diagnosis of Asperger's disorder, *Health,* 18.2, 179–195.
Happé, F. (1999). *Autism*. London, UCL Press.
Happé, F., Frith, U. (1996). The neuropsychology of autism, *Brain,* 119, 1377-1400.
Heasman, B., Gillespie, A. (2019). Neurodivergent Intersubjectivity: Distinctive Features of How Autistic People Create Shared Understanding. *Autism,* 23, no. 4, 910–21.
Henriksen M.G., Englander M., Nordgaard J. (2021). Methods of data collection in psychopathology: the role of semi-structured, phenomenological interviews. *Phenom Cogn Sci.*, https://doi.org/10.1007/s11097-021-09776-5.
Hens, K., Robeyns. I., Schaubroeck, K. (2018). The Ethics of Autism. *Philosophy Compass,* 14, no. 2:E12559.
Kapp, S. K., Steward, R., Crane, L., Elliott, D., Elphick, C., Pellicano, E., Ginny R. (2019). 'People Should Be Allowed to Do What They Like': Autistic Adults' Views and Experiences of Stimming. *Autism,* 23, no. 7, 1782–92.
Kidd, I., Medina, J., Pohlhaus, G. Jr., eds. (2017). *The Routledge Handbook of Epistemic Injustice*. London: Routledge.

Klin, A., Jones, W., Schultz, R., Volkmar, F. (2003). The enactive mind, or from actions to cognition: Lessons from autism. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 358 (1430), 345–360.
Klin, A., Danovitch, J. H., Merz, A. B., and Volkmar, F. R. (2007). Circumscribed interests in higher functioning individuals with autism spectrum disorders: an exploratory study. *Res. Pract. Pers. Sev. Disabil.*, 32, 89–100.
Köhler, W. (1929). *Gestalt Psychology*. New York: Horace Liveright.
Krueger, J., Overgaard, S. (2012). Seeing Subjectivity: Defending a Perceptual Account of Other Minds. *ProtoSociology,* 47, 239–62.
Krueger, J., Maiese, M. (2018). Mental institutions, habits of mind, and an extended approach to autism. *Thaumàzein,* 6, 10–4.
Krueger, J. (2021). Enactivism, Other Minds, and Mental Disorders. *Synthese,* 198, 365–389.
Kyselo, M. (2016). The enactive approach and disorders of the self. The case of schizophrenia. *Phenomenology and the Cognitive Sciences*, 15 (4), 591–616.
Leary, M. R., Donnellan, A. M. (2012). *Autism: Sensory-movement Differences and Diversity*. Cambridge: Cambridge Book Review Press.
León, F. (2019). Autism, social connectedness, and minimal social acts. *Adaptive Behavior*, 27(1),75-89.
Maiese, M. (2016). *Embodied selves and divided minds*. Oxford: Oxford University Press.
Maiese, M. (2021). Autism as disordered sense-making. *Constructivist Foundations,* 17(1): 056–058. https://constructivist.info/17/1/056.
McGeer, V. (2005). Out of the mouths of autistics: Subjective report and its role in cognitive theorizing. In A. Brook & K. Akins (Eds.), *Cognition and the brain: The philosophy and neuroscience movement*. Cambridge: Cambridge University Press.
Mercier, C., Mottron, L., Belleville, S. (2000). A psychosocial study on restricted interests in high functioning persons with pervasive developmental disorders. *Autism,* 4, 406–425.
Merleau-Ponty, M. (1945/2012). *Phenomenology of Perception*. Translated by D. A. Landes. Abingdon, Oxon: Routledge.
Milton, Damian E.M. (2012). On the ontological status of autism: the 'double empathy problem'. *Disability & Society*, 27:6, 883-887. DOI: 10.1080/09687599.2012.710008.
Nešić, J. (2022). Enaktivizam kao okvir za psihijatrijske poremećaje. *Engrami,* Vol. 44, (1). https://doi.org/10.5937/engrami44-40298.
Newen, A., de Bruin, L., Gallagher, S. (Eds.) (2018). *Oxford handbook of cognition: Embodied, enactive, embedded and extended*. Oxford: Oxford University Press.
Noë, A. (2004). *Action in Perception*. Cambridge, MA: MIT Press.
Reed, E., Bril, B. (1996). The primacy of action in development. A commentary of N. Bernstein. In M. L. Latash (Ed.), *Dexterity and its development* (pp. 431–451). Erlbaum.
Rietveld E., Kiverstein J. (2014). A rich landscape of affordances. *Ecol Psychol,* 26(4), 325–352.
Rietveld, E., Denys, D., van Westen, M. (2018). Ecological-ecological-enactive cognition as engaging with a field of relevant affordances: The Skilled Intentionality Framework (SIF). In A. Newen, L. de Bruin, & S. Gallagher (Eds.), *Oxford handbook of cognition: Embodied, enactive, embedded and extended*. Oxford: Oxford University Press.
Schilbach, L. (2016). Towards a second-person neuropsychiatry. *Philosophical Transactions of the Royal Society B: Biological Sciences,* 371(1686),20150081. https://doi.org/10.1098/rstb.2015.0081.

Scrutton, A. P. (2017). Epistemic Injustice and Mental Illness. In Ian James Kidd, José Medina, and Gaile Pohlhaus Jr. (Eds.), *The Routledge Handbook of Epistemic Injustice*, (pp. 347–55). London: Routledge.

Spencer, L. (2022). Epistemic Injustice in Late-Stage Dementia: A Case for Non-Verbal Testimonial Injustice. *Social Epistemology*. DOI: 10.1080/02691728.2022.2103474.

Thompson, E. (2007). *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Cambridge. MA: Harvard University Press.

Toro, J., Kiverstein, J., Rietveld, E. (2020). The Ecological-Enactive Model of Disability: Why Disability Does Not Entail Pathological Embodiment. *Frontiers in Psychology,* 11: 1162.

Van De Cruys, S., Eveers, K., Van der Hallen, R., Van Eylen, L., Boets, B., De-Witt, L., Wagemans, J. (2014). Precise minds in uncertain worlds: Predictive coding in autism. *Psychological Review,* 121(4), 649–675.

Varela, F., Thompson, E., Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT Press.

Varela, F. J. (1996). Neurophenomenology: A methodological remedy for the hard problem. *Journal of Consciousness Studies,* 3(4), 330–49.

von Uexküll, J. (1909). *Umwelt und Innenwelt der Tiere*. Berlin: Springer.

Wittgenstein, L. (1953). *Philosophical investigations*. Oxford: Blackwell.

Zahavi, D., Parnas, J. (2003). Conceptual Problems in Infantile Autism Research: Why Cognitive Science Needs Phenomenology. *Journal of Consciousness Studies*, 10(9–10), 53–71.