

THE DOUBLE EMPATHY PROBLEM AS A DIALOGIC SENSE-MAKING STYLE ASYMMETRY

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Abstract: The occurrence of social comprehension difficulties when people living with autism, henceforth: autistics,² interact with neurotypicals motivates the re-emergence of key questions about the mind and its interaction with other minds; what are minds and how do they relate to the world and others? The disruption of smooth social interaction brings forth the question of *how is a mind able to socially interact* and this question motivates one to tacitly provide a definition of *what a mind is*. This is visible in Simon-Baron Cohen's exposition of the *theory of mind* theory, henceforth: ToM, in his book *Mindblindness*. In this book, Baron Cohen states that autistics have at least a degree of mindblindness and that mindreading³ is the means through which the mind relates to other minds.⁴ His tacit descriptions of ontological properties of the mind, henceforth: ontological descriptions or assertions, are utterly different from those provided by enactivists and by those who contribute to the 20th century tradition of phenomenology, henceforth: phenomenologists.⁵ The tension between the ontological descriptions of ToM Theory and those provided by enactivists and phenomenologists has led to a thriving battle ground.

This article's key aim is to provide descriptions that facilitate enactivist or phenomenological analyses that engage with the double empathy problem

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² Quirk, "Results and Analysis of the Autistic Not Weird 2022 Autism Survey - Autistic Not Weird"; Chapman and Bovel, "Neurodiversity, Advocacy, Anti-Therapy."

³ Baron Cohen's version of ToM theory is the key cognitive model used for explaining social interaction difficulties in autism.

⁴ Baron-Cohen, 1–5, 21–22, 26–30.

⁵ Gallagher, "Understanding Interpersonal Problems in Autism."

hypothesis. To bring its aim to fruition, I follow three steps. Firstly, I define the approaches and concepts I use: phenomenology, enactivism, and the double empathy problem. Secondly, I argue in favor of using phenomenology and enactivism for explaining social difficulties in autism by presenting two, at least *prima facie*, disadvantages of Baron Cohen's articulation of ToM theory; one disadvantage stems from the ethical implications of his ontological assertions and the other stems from his ontological assertions. Thirdly, I describe autistic-neurotypical social interactions in a non-pathologizing manner by performing an enactivist analysis of the double-empathy problem surrounding autistic-neurotypical social interactions.

Keywords: double empathy problem, enactivism, dialogic sense-making.

1. Introduction

1.1. Defining phenomenology

The continental 20th century tradition of phenomenology has been created by the mathematician and philosopher Edmund Husserl whose goals were similar to those of the mathematician and philosopher Gottlob Frege.⁶ Both of them have aimed to use precise abstract descriptions for providing foundations for STEM activities and both have vehemently rejected psychologism.⁷ These two pioneers diverged regarding their analysis object and methodology. Frege's analysis object was mathematics, he aimed at establishing rigorous conceptual foundations for mathematics. Husserl's analysis object was the mind and he aimed at establishing rigorous conceptual foundations for scientific practice in general.⁸ Frege developed the contemporary core methodological tools for formal logical and linguistic analysis.⁹ Husserl invented a method for detecting and analyzing those series of interconnected traits, henceforth: structures, that

⁶ McIntyre, "Husserl and Frege."

⁷ Mohanty, "Husserl and Frege."

⁸ Gelan, "The Idea of Rigorous Science in Husserl's Phenomenology and Its Relevance for the Other Sciences."

⁹ Cook, "Frege's Logic."

define the necessary, henceforth: invariant, traits of the mind or of specific mental states and acts.¹⁰

Husserl was not an introspectionist because he was not interested in a specific person's experience, but in finding those structures that specify the invariant structures of the mind, its mental states, and its connection to the world.¹¹ Phenomenologists name mental states intentional acts because any conscious state, any *what is it like to be a mind S is a what is it like for S to be directed towards an object P*. Phenomenologists hold that mental states are intrinsically connected to the world; this applies even to brains in a vat. For a phenomenologist, a mind in a vat is a mind connected to the quasi-world produced by the stimulus given to that brain. Phenomenologists state that one's conscious connection to the world is a direct connection to it and not one mediated through representations. Indeed, in conscious experience, the mind's intentional connection to an object is given as a connection that is not mediated through representation. This is clearly so by noticing how one experiences the world; to give an example, one's experience of sitting in a café is not one of sitting in a mental representation, i.e., in a series of signs that denote a café that is not consciously experienced.¹²

The seemingly bizarre assertion that one's mind is directly connected to the world becomes clear once one explains how phenomenologists define the term *world* and the locution *accessing the object as such*. The impact of how phenomenologists define them shapes the phenomenologists' description of how the gap between objects and the mind is traversed. Phenomenologists describe the gap between an object and the mind as traversed by the interaction between that object's manner of expressing itself to that mind and that mind's manner of receiving that object.¹³ In contrast, classical philosophy of mind describes this gap as being quasi-traversed by the mind's act of generating a representation that connects that mind to that object.

¹⁰ Husserl, *Experience and Judgment: Investigations in a Genealogy of Logic*.

¹¹ Zahavi, *Phenomenology*, 15, 34–38.

¹² Zahavi, 16–23.

¹³ Husserl, *Ideas*; Husserl, *Analyses Concerning Passive and Active Synthesis*.

The phenomenological definition of the world, if made explicit, is that the *world* is the set that must always include all the following sets of members: minds, mental experiences, and objects that are not mental experiences. They are tacitly defined in this way because phenomenologists assert that minds cannot exist without at least one object and that objects cannot exist without at least one mind. For analyzing the reasons behind the aforementioned assertion, I recommend reading the chapter “Internalism, externalism, and transcendental idealism” from *Husserl’s Legacy*.¹⁴ Therefore, for phenomenologists, if a set has no member that is a mental experience or a mind, then that set cannot be equivalent to the world. The reverse is equally the case, if a set has no member that is not a mental experience or a mind, then that set cannot be equivalent to the world. Phenomenologists define the mind’s *access to the object in itself* as that mind’s access to the *object in itself* as that object expresses itself to that mind in a manner *receivable by that mind*. The explanations provided above are meant as mere clarifications of points often stressed by phenomenologists.¹⁵

1.2. Defining enactivism

Enactivism is a subfield of radically embodied cognitive science. Radically embodied cognitive science is that branch of cognitive science that describes cognitive processes without relying on mental representations, but on dynamic process occurring between an organism and its environment. Enactivism is that subfield of radically embodied cognitive science that took its starting point from the book *The Embodied Mind*.¹⁶

For enactivists, the mind is not *an empty name*, and they do not make *negative existential*¹⁷ claims about theory of mind (ToM), they assume that

¹⁴ Zahavi, *Husserl’s Legacy*, 127–29.

¹⁵ Merleau-Ponty, *Phenomenology of Perception*; Husserl, *Ideas*; Zahavi, *Phenomenology*.

¹⁶ Varela, Thompson, and Rosch, *The Embodied Mind*; “Enactivism | Internet Encyclopedia of Philosophy,” sec. 1. Core Commitments.

¹⁷ For more about negative existentials, see Dumitru, M., and Kroon, F. (2008). What to say when there is nothing to talk about. *Crítica* (México, DF), 40(120), 97-109.

the mind results from "multiple kinds of physiological, sensorimotor, and interpersonal" processes that influence and are influenced by the environment.¹⁸ Enactivists hold that an agent, i.e., an organism, is *coupled* to an environment if and only if that agent and that environment mutually influence each other.¹⁹ In enactivist cognitive science, *enaction* is the organism's act of transforming the environment such that it fulfils its needs.²⁰ Organisms create meaning when they shape, couple with, and adapt to their environment.²¹ This activity of creating meaning is named *sense-making*.²² When at least two organism interact, their interaction becomes a quasi-autonomous system that generates new meaning; this manner of meaning production is named *participatory sense-making*.²³ To argue for the ontological adequacy of enactivist cognitive science is beyond this paper's scope.

1.3. Defining the double empathy problem hypothesis

The double empathy problem hypothesis states that one's low social comprehension success degree is not caused only by one's mindreading faculty, but also by how other participants socially interact with you. In other words, success in understanding the other's mental state is a result of a process that is co-authored by all participants. According to Damian Milton, "social subtext is never fully given as a set of a priori circumstances, but is actively constructed by social agents engaged in material and mental production."²⁴ He elaborates on this as follows:

There is a tendency in the application of positivist methodologies in cognitive psychology and science to incorrectly assume that there is a set

¹⁸ Di Paolo, Cuffari, and Jaegher, *Linguistic Bodies*, 17–18.

¹⁹ Di Paolo, Cuffari, and Jaegher, 17–18, 21, 46,.

²⁰ Di Paolo, Cuffari, and Jaegher, 21–22, 46, 109–11.

²¹ Di Paolo, Cuffari, and Jaegher, 17–18, 21, 32–36,.

²² Di Paolo, Cuffari, and Jaegher, 32–36.

²³ Di Paolo, Cuffari, and Jaegher, 73–75.

²⁴ Milton, "On the Ontological Status of Autism," 884.

of definable social norms and rules that exist for people to follow. [...] The 'theory of mind' and 'empathy' so lauded in normative psychological models of human interaction refers to the ability a 'non-autistic spectrum' (non-AS) individual has to assume understandings of the mental states and motives of other people. When such 'empathy' is applied toward an 'autistic person', however, it is often widely inaccurate in its measure. Such attempts are often felt as invasive, imposing and threatening by an 'autistic person', especially when protestations to the contrary are ignored by the non-AS person doing the 'empathizing'.²⁵

2. The two, at least *prima facie*, disadvantages of Baron-Cohen's ToM Theory

2.1 Baron-Cohen's tacit ontological descriptions

Before explaining the two disadvantages of using Baron Cohen's version of ToM model for analyzing social interaction in autism, I need to make explicit his ontological description of the mind and of its access to other minds. For him, the mind is that kind of agent that has states such as wanting, knowing, planning, and recognizing,²⁶ and the mind is situated "inside one's own head," namely, inside one's brain.²⁷ He asserts in his thought experiments that human minds occur in such manner that they cannot directly access other minds.²⁸ For him, social comprehension is the result of using the mental act named by him *mindreading*; this mental act is that of *interpreting* the actions of others as those of beings endowed with mental states.²⁹ Therefore, the mental act of interpreting the other assigns to that other mental states and these assigned mental states are implicit representations. Also, mindreading is most often performed unconsciously. That mindreading is a mental act of assigning mental states to the other, implies that the other exists as another for oneself exclusively due to one's

²⁵ Milton, 884.

²⁶ Baron-Cohen, *Mindblindness*, 1–5.

²⁷ Baron-Cohen, 27.

²⁸ Baron-Cohen, 21–24.

²⁹ Baron-Cohen, 1–5, 26–30.

own interpretative activity.³⁰ In other words, given his assumption that human minds have no direct access to the world and to other minds, for him, social comprehension also takes place exclusively inside one's mind.

2.2. The ethical disadvantage of classical ToM Theory

Parallel to the ontological tension between an enactivist and a ToM Theory description of autism, there is also an ethical tension surrounding classical ToM Theory and autism. The later tension is between ToM Theory's assertion that autistics suffer from mindblindness and the neurodiveristy movement's non-pathologising assertion that autism is not a disorder, but only a non-neurotypical neurological configuration. Pathologising is the act of implicitly or explicitly asserting that one suffers from a deficiency when in fact one just navigates the world differently. The neurodiversity movement is the movement that argues for the empowerment and social inclusion of people whose neurological configuration is highly different from that of neurotypicals. This movement's key claim is that conditions such as autism, ADHD, dyslexia, etc., are not disorders, but merely different manners of navigating the world.³¹ I argue that ToM indeed faces the aforementioned ethical tension and that this tension's existence favors the usage of enactivist and phenomenological descriptions of autistic-neurotypical social interactions instead of those provided by Baron Cohen's ToM Theory.

The neurodiversity movement holds that during autistic-neurotypical social interactions, both autistics and neurotypicals face social comprehension difficulties because, according to this movement, the autistics' decreased social comprehension ability is not the result of the autistics' mindreading faculty in itself, but that of the decreased compatibility between the autistic and neurotypical manners of

³⁰ Baron-Cohen, 1–5, 21–30, 32–58.

³¹ Milton, "On the Ontological Status of Autism"; Walker, *Neuroqueer Heresies*, sec. Throw Away the Master's Tools: Liberating Ourselves from the Pathology Paradigm; Neurodiversity: Some Basic Terms & Definitions; Defining Neurodiversity.

socializing. This description of autistic-neurotypical social interactions has been explicitly brought in the neurodiversity movement's discourse by Damian Milton's double empathy problem hypothesis.³²

Baron-Cohen's model of the ToM describes autism as a disorder because his model asserts that the lower social comprehension degree found in autistics—unless accidental factors occur—is caused only by a deficient mindreading faculty, within the autistics' minds.³³ The ethical, at least *prima facie*, disadvantage of his model that I argue for is that its metaphysical commitments facilitate the pathologization of autistics. My argument involves answering the following questions: **1.** Is his ToM Theory right when stating that their lower social comprehension degree is caused only by their deficient mindreading faculty? **2.** Is his ToM Theory's metaphysical description of the mind forcing classical ToM Theory to affirm the just aforementioned assertion? **3.** Is his model of the ToM right in describing autism as a social interaction disorder or is classical ToM Theory pathologising autistics?

1. His ToM Theory is not flawed by stating that the lower social comprehension degree of autistics is caused only by the autistics' mindreading faculty because social comprehension involves the interpretation of other participants' expressions—it can be both verbal or non-verbal—and this interpretative activity's success depends on the compatibility between one's *interpretative schema* and the expression to be interpreted. I call an *interpretative schema* a social agent's set of tacit inference rules that tell that social agent how to convert the other social agent's expressions into an interpretation of that specific expression, this interpretation can also be a prediction of the other agent's actions or intentions. If the other agent's expression is not compatible with one's interpretative schema, then the interpretative act fails, but neither due to the interpreter alone nor due to the other agent alone.

Autistics not requiring substantial support are certainly able to understand that other people have their own mental states; in such cases, the mindblindness attributed to them is partial and it is considered to only

³² Milton, "On the Ontological Status of Autism."

³³ Baron-Cohen, *Mindblindness*, 1–7, 59–63, 69–71.

decrease the quality of their social comprehension.³⁴ In such cases, it cannot be stated that only the autistic interpreter is at fault because no interpretation can happen without the bidirectional influence between one's interpretative schema and the content to be interpreted; for there to be a successful interpretation, there needs to exist an active interpretative schema that derives an interpretation from the expressed content and there needs to exist an expressed content that is in such a manner that the interpretative schema derives from it a successful interpretation. Because of this bidirectional influence in any interpretative activity, and especially during social interpretative activities between highly different manners of interpreting what is relevant during social interactions, no agent alone can be the cause of one's low interpretative success degree. However, strictly speaking, no agent can be the cause of any low interpretative success degree because interpretative success is always the result of the interaction between agents; therefore, it cannot result from each agent's actions taken in isolation.³⁵

2. His ToM Theory's ontological assertion does not force ToM Theory to assert that mindreading cannot be influenced by the content that has to be interpreted by that mindreading agent. This is so because his ToM Theory's assertion that social comprehension is an act entirely performed inside one's mind without access to others' mental states in themselves does not entail that the mind performing that mindreading act cannot be influenced by the content it has to interpret. Therefore, his model of ToM can assert, without contradicting its ontological assertions, that not only an autistic's mindreading faculty causes that autistic's low social comprehension degree.

However, classical ToM Theory's model of social comprehension, by focusing only on an agent's interpretative acts in isolation, incentivizes interpretations according to which the mindreading faculty is the only cause for those social comprehension difficulties seen in autistics. This is the ethical disadvantage of at least his ToM Theory, namely, that it

³⁴ Fuchs, "Pathologies of Intersubjectivity in Autism and Schizophrenia," 197–98.

³⁵ Heasman et al., "Towards Autistic Flow Theory"; Milton, "On the Ontological Status of Autism."

incentivizes interpretations that place the fault for an autistic's social comprehension difficulty on the autistic person alone. In fact, the fault is not to be ascribed to the agents, but to the lower compatibility degree between each agent's social practices.

3. Given the answers to points 1 and 2, it cannot be stated that autism is a social interaction disorder because an autistic's lower interpretative success degree cannot be due to that autistic's social interpretation faculties in themselves, but only due to the decreased compatibility between autistic and neurotypical social practices. In the realm of social interaction between agents with highly different practices and needs, the occurring difficulties in social comprehensions cannot be found inside an agent.³⁶

The aforementioned ethical tension favors the usage of enactivist and phenomenological descriptions of autistic-neurotypical social interactions, instead of those provided by his model of ToM, because enactivist and phenomenological descriptions already have a conceptual apparatus that emphasizes the aforementioned bidirectional mutual influence. Enactivist cognitive science, by centering around dynamic processes, provides a framework highly suitable for analyzing states of affair such as the social comprehension difficulties caused by the lower compatibility degree between social agents with highly different social practices. Due to the aforementioned reasons, I hold that it is more economical to use enactivist and phenomenological concepts to analyze autistic-allistic social interactions than adapting ToM Theory such that it acquires the fidelity needed for properly explaining and analyzing such social interactions.

2.3. The disadvantage of his ToM Theory's ontological assertions

The disadvantage of his ToM Theory's ontological description of the mind as lacking any direct access to other minds and as confined inside one's

³⁶ Milton, "On the Ontological Status of Autism"; Lynch, "Invisible Abuse: ABA and the Things Only Autistic People Can See."

brain is that his ToM Theory is less compatible with phenomenological and enactivist descriptions of autistic-allistic social interactions. The aforementioned decreased compatibility is a disadvantage for his ToM Theory because it decreases his ToM Theory's ability to analyze autistic social interaction from the perspective of autistics' conscious experience. Analyzing autistic social interactions from this perspective, by being able to make visible the perspective of autistics themselves, facilitates an exploration of autistic social interactions that does not pathologize them.

However, one can object that his ToM Theory's low compatibility with other relevant theories is not a disadvantage because his ToM Theory, unlike phenomenological and enactivist theories, provides a true ontological description of how minds are able to understand and predict the actions of other minds. My reply to this objection is that even if his ontological descriptions are true, his ToM Theory's low compatibility with enactivist and phenomenological descriptions is a disadvantage because rejecting such descriptions hampers one's comprehension of that part of the mind for which social interactions are meaningful, namely, that mind's conscious part.³⁷ It hampers it even if phenomenological and enactivist descriptions were false ontological descriptions of the asubjective world;³⁸ this is so since one can use phenomenological and enactivist approaches without granting their descriptions the status of objective ontological assertions.

For properly understanding autistic social interactions, it is necessary to also use phenomenological and enactivist concepts. Regarding enactivist concepts, this is so because they enable the analysis of the dynamics involved in autistic-neurotypical social interactions without reducing these interactions' complexity; this complexity is reduced when focusing only on the peculiarities of how autistics socially interact. Regarding phenomenological concepts, this is so because they were especially developed to and tailored for capturing the features of mental acts as consciously experienced by a mind.

³⁷ i.e., even if such approaches fail to provide descriptions that denote the ontological state of affairs.

³⁸ I do not believe that phenomenological and enactivist approaches lead to false metaphysical description.

For understanding social comprehension in autism, it is important to understand autistic mental acts as they are consciously experienced by autistic minds because understanding them decreases the distortions caused by neurotypical interpretations of autistic social interactions; such interpretations often risk to be distorted by the prevalent interpretative neurotypically informed frameworks.³⁹ It is only natural for misunderstandings to occur when agents with different social practices and interpretative frameworks socially interact.⁴⁰ Because an epistemic gap is involved during such interactions, it is important to take into account how other agents navigate the world.

3. An enactivist description and analysis of the double empathy problem

In this section, I will use enactivist concepts from the book *Linguistic bodies* to analyze Damian Milton's double empathy problem hypothesis.⁴¹ Before using these concepts, I have to explain and define these concepts and present how the authors of this book describe the difficulties that autistics face during social interactions. First, I will use these concepts and descriptions to analyze Milton's articulation of autistic-neurotypical social interactions. Afterwards, I will use these concepts and descriptions to analyze those traits of autistic-social interactions influenced the most by the double-empathy problem.

3.1. Presenting the enactivist concepts I will use

The book *Linguistic Bodies* creates multiple concepts to describe mutually influencing dynamics that together form one's mental states and one's interaction with the world. Their descriptions involve both sense-making

³⁹ Lynch, "Invisible Abuse: ABA and the Things Only Autistic People Can See"; Walker, *Neuroqueer Heresies*, sec. Throw Away the Master's Tools: Liberating Ourselves from the Pathology Paradigm; Chapman and Bovel, "Neurodiversity, Advocacy, Anti-Therapy."

⁴⁰ Milton, "On the Ontological Status of Autism."

⁴¹ Di Paolo, Cuffari, and Jaegher, *Linguistic Bodies*.

and participatory sense-making.⁴² In the following, I am interested in those concepts created by the book's authors for describing intersubjective processes, i.e., processes that involve participatory sense-making. Below I will present these concepts by providing a unitary description of how they are interconnected. If I were to present each concept separately, I would risk reducing the enactivist interdependent dynamic descriptions to atomistic elements. The aforementioned enactivist dynamic descriptions are presented below.

When organisms successfully interact with each other by repeatedly performing the same participatory sense-making acts across time, these organisms' interaction dynamic form a stable pattern. The authors of *Linguistic Bodies* named this type of patterns *partial acts*. For multiple organisms to mutually apply the same *partial acts*, these partial acts need to become *normative partial acts*, they need to tell all the involved agents how to respond. The book's authors named strongly normative partial acts *interlocking social acts*.⁴³ All the types of participatory sense-making mentioned above do not require mindreading; they can be viewed as precursors of ToM. In their enactivist picture, mindreading is enabled by the most complex type of participatory sense-making; they named this type of participatory sense-making *dialogical sense making*.⁴⁴ Dialogical sense-making involves the turn-based verbal or non-verbal information exchange between participants and it can be performed only by linguistic bodies.⁴⁵ They define a *linguistic body* as an organism's set of "embodied and material patterns" through which that organism expresses itself to others either through speech or any other modality.⁴⁶ They named these patterns *utterances*.⁴⁷ However, to avoid confusion, I now rename them *communication patterns*.

Dialogical participatory sense-making involves the turn-based expression of *communication patterns*. This type of sense-making produces

⁴² Di Paolo, Cuffari, and Jaegher, 32–204.

⁴³ Di Paolo, Cuffari, and Jaegher, 139–59, 150–51, 159.

⁴⁴ Di Paolo, Cuffari, and Jaegher, 172–75, 191, 195.

⁴⁵ Di Paolo, Cuffari, and Jaegher, 172–75, 191.

⁴⁶ Di Paolo, Cuffari, and Jaegher, 193.

⁴⁷ Di Paolo, Cuffari, and Jaegher, 173–75.

a more stable interaction pattern that solves those intersubjective tensions unsolvable by any other type of participatory sense-making act. Dialogical sense-making solves these tensions by better organizing the participants' sense-making production, by allowing only an agent per turn to emit a *communication pattern*. This creates an asymmetry between the agent emitting the *communication pattern* (the turn holder) and the rest of the participants (those who receive the turn holder's *communication pattern*).⁴⁸ This asymmetry enables a linguistic body to perceive the other as a linguistic body with distinct mental states and intentions. This is so because, when the turn-holder has a strong regulator role, the turn-holder leads the participants to recognize her/him as an autonomous agent. For the dialogue to continue, the audience also has to recognise the turn-holder as an autonomous agent.⁴⁹

However, even in a dialogue, there is not guarantee that one knows how to produce adequate *communication patterns* and that others will adequately interpret these communication patterns. To increase the chances of enacting a smooth dialogue, linguistic bodies must resort to social interaction patterns that "precoordinate the expectations of producers and audience." These patterns are named *participation genre*, par example: "cooking together, eating together, finding seats at the theatre, coordinating labour, playing, etc."⁵⁰ To prevent a participation genre from failing, the turn holder has to strategically modify his/her *communication pattern*. To do so, a linguistic body has to apply *self-control*, namely, to act both as a producer and an interpreter. More precisely, *self-control* involves interpreting one's own *communication pattern* before producing it in order to increase one's social success.⁵¹ In a dialogue, for ensuring that the participants are on the same page, they can use *reported communication patterns*, namely, they can repeat or modify a participant's previous *communication pattern*. By using *reported communication patterns*, linguistic bodies make their interpretations explicit, and, by doing so, they

⁴⁸ Di Paolo, Cuffari, and Jaegher, 169–75.

⁴⁹ Di Paolo, Cuffari, and Jaegher, 169–76, 193.

⁵⁰ Di Paolo, Cuffari, and Jaegher, 178.

⁵¹ Di Paolo, Cuffari, and Jaegher, 184–86.

can coordinate their interpretations.⁵² By coordinating them, linguistic bodies create dialogues that are both stable and dynamic. This coordination process is named *frame building*.⁵³ By interacting with each other, linguistic bodies can transform themselves in two ways, either by idiosyncratically adopting the other's *communication patterns*, i.e., by *incorporating* them, or by being changed by these patterns, i.e., by *incarnating* them. Too much incarnation leads to decreased autonomy and not enough incarnation makes one to be too different from others.⁵⁴

3.2. Autistic-neurotypical dialogic sense-making as described in *Linguistic Bodies*

In chapter 10 from the *Linguistic Bodies*,⁵⁵ its authors state that the core participatory sense-making difficulty found in autistic-neurotypical social interactions is that of “co-construct[ing] and coregulate[ing] an interactive dissonance together with other participants.”⁵⁶ More specifically, the key not adequately managed coregulation tension is that between “the regulator and regulated role.”⁵⁷ This tension is not adequately managed “because of [a] clash between the autistic self-organization and embodiment” and the neurotypical “cultural habitus.”⁵⁸ The coregulation difficulties occurring during autistic-neurotypical social interactions, by affecting the production of dialogic acts, lead to shortcomings in recognizing other participants “as autonomous sense-makers.”⁵⁹ The book's authors explicitly state that neurotypicals have difficulties in recognizing autistics as autonomous sense-makers and that autistics have difficulties in recognizing neurotypicals as autonomous

⁵² Di Paolo, Cuffari, and Jaegher, 186–90.

⁵³ Di Paolo, Cuffari, and Jaegher, 190.

⁵⁴ Di Paolo, Cuffari, and Jaegher, 191–94, 211–12.

⁵⁵ Di Paolo, Cuffari, and Jaegher, 261–77.

⁵⁶ Di Paolo, Cuffari, and Jaegher, 266.

⁵⁷ Di Paolo, Cuffari, and Jaegher, 266.

⁵⁸ Di Paolo, Cuffari, and Jaegher, 266.

⁵⁹ Di Paolo, Cuffari, and Jaegher, 266.

sense-makers. Based on these descriptions, they assert two hypotheses on the key participatory sense-making difficulties characterizing autistic-neurotypical social interactions:

1. Autistics would try to “cope with the inherent tensions of participatory sense-making between individual and interactive norms [either] by” regulating a social interaction too much (*over-shooting*) or not enough (*undershooting*).⁶⁰ In other words, autistics would either “attempt to resolve a particular tension as individual agents rather than in a joint act” or “withdraw momentarily to allow others to resolve the tension” instead of participating in the process.⁶¹
2. Autistics would better tackle the *pragmatic aspects* of a social interaction than the social interaction’s *expressive aspects*. In other words, autistics would tackle those aspects that directly impact the interaction better than those that depend on “the relations between the participants.”⁶² They hypothesize this because the autistic-neurotypical social interaction involves coregulation difficulties.

3.3. The enactivist conceptualization and analysis of double-empathy problem

I start by quoting Damian Milton’s definition of the double empathy problem. I do so to unpack his definition by using enactivist concepts from *Linguistic Bodies*. By unpacking his definition, I can analyze it by using enactivist concepts. His definition of the double empathy problem is the following:

The ‘double empathy problem’: a disjuncture in reciprocity between two differently disposed social actors which becomes more marked the wider the disjuncture in dispositional perceptions of the lifeworld– perceived as

⁶⁰ Di Paolo, Cuffari, and Jaegher, 266.

⁶¹ Di Paolo, Cuffari, and Jaegher, 266.

⁶² Di Paolo, Cuffari, and Jaegher, 269.

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'.⁶³

The double empathy problem is a lived experience, is a series of intentional acts. These intentional acts are directed to the other sense-makers and to the social interaction as such; this interaction is a quasi-autonomous participatory sense-making dynamic. All intentional acts involve the bidirectional dynamic co-influence between the subject and the objects, between the embodied sense-maker and a specific part of the environment (including other sense-makers). The double empathy problem is a lived experience in which linguistic bodies have difficulties in co-constructing a shared sense because of unsolved participatory and dialogical sense-making tensions. To solve such tensions, linguistic bodies need to influence each other without inhibiting the other's shared sense-making production; this inhibiting occurs when the participatory and dialogic sense-making agents have incompatible sense-making and embodiment styles. These incompatibilities lead to the disruption of each linguistic body's expectations about the possible meaningful communication patterns of other linguistic bodies. This disruption is a disruption of the natural attitude that is experienced by both autistics and neurotypicals. However, according to Damian Milton, this disruption is "more sever for the non-autistic" because the disruption itself is an "unusual" experience for the neurotypical, but it is "a common experience" for "the autistic."⁶⁴ The autistics' familiarity with the disruption does not make it less traumatizing, on the contrary. Therefore, the intensity of the disruption is not proportional with its traumatic intensity. Interestingly, neurotypicals are often unaware that such disruptions occur because their lifeworld, by being hegemonic, is habitually believed by them as the only one; because of this, the disruption is "healed perceptually."⁶⁵ To be *healed perceptually* denotes the

⁶³ Milton, "On the Ontological Status of Autism," 884.

⁶⁴ Milton, 885.

⁶⁵ Milton, 885.

following state of affairs: the disruption of S's natural attitude is unnoticed by S because S tacitly interprets S's social interaction with J as an interaction whose hindrances 1. must be caused by J's peculiar interaction manner and 2. cannot be caused by S's social interaction manner. Therefore, *perceptual healing* is a process that alters one's interpretation of one's own social interaction. In Milton's own words, "a person who sees their interactions as 'normal' [...] can apply the label on the 'other' locating the problem in them"⁶⁶

The key factors that hinder the empowerment of autistic people, for Milton, are the following: 1. "the normalization agenda" and stigmatization motivated by perceptual healing, 2. "internalized oppression," 3. the exclusion of autistics from producing knowledge on autistics.⁶⁷ In the rest of this sub-section, I will supplement Milton's analysis of these factors with enactivist concepts from *Linguistic Bodies*.

1. Perceptual healing, by placing the social interaction difficulty's cause entirely within the sense-maker that deviates from the majority's natural attitude, it makes it more likely for neurotypicals to deem autistics as "abnormal" and, therefore, to also "stigmatise" or "sanction" them. Perceptual healing, by effacing the fact that autistics are fully developed, yet different, linguistic bodies, it encourages neurotypicals to over-regulate the interaction dynamic by trying to convert autistic sense-making practices into neurotypical ones.⁶⁸ In other words, perceptual healing incentivizes the normalization of autistics.

2. Internalized oppression is the process through which an autistic alters his/her interpretation of oneself by adopting the neurotypical's tacit or explicit belief that autistics suffer from a disorder. In other words, autistic starts to believe, like many neurotypicals do, that autism is a pathology. According to Milton, this process "lead[s] to a self-imposed psycho-emotional disablement." In other words, internalized oppression destabilises how autistics apprehend their own abilities and needs.⁶⁹

⁶⁶ Milton, 885.

⁶⁷ Milton, 885.

⁶⁸ Milton, 885.

⁶⁹ Milton, 885.

When internalized oppression takes place, autistics introject neurotypical sense-making practices and communication pattern. By introjecting them, autistic sense-makers start to apprehend situations through the neurotypical natural attitude, through a natural attitude that is neither their own nor compatible with their own manner of sense-making. I conclude, based on the aforementioned, that the neurotypicals' difficulty in adequately recognizing autistics as autonomous sense-makers does not emerge only due to participatory sense-making asymmetries, but also due to perceptual healing.

3. Knowledge production is the process of acquiring information about something or somebody, in this case, about autism and autistics. Milton's critique is that the production of knowledge about autism is not mainly done by autistics, but by neurotypicals that, instead of allowing autistics to contribute, they place them as "the 'product' of the industry, the thing' that is 'intervened' with."⁷⁰ The exclusion of autistics from knowledge production also entails the exclusion of autistics from the material production of practices that empower autistics. The coregulation difficulties occurring during autistic-neurotypical social interactions lead to the decreased occurrence of smooth dialogic sense-making. This decreased occurrence, by affecting the genuine recognition of autistics as autonomous sense-makers, impacts, at the macro level, the knowledge production about autistics.

3.4. Analyzing those autistic social interaction dialogic participatory sense-making practices that are most often involved in the double empathy problem

The dialogical participatory sense-making acts most often involved in the double empathy problem are those that often involve the internalisation of communication pattern originating from agents that inhabit a different lifeworld than one's own. This is so because the double empathy problem results from "the asymmetry" between how the "social actors" involved

⁷⁰ Milton, 885.

make sense of each other's social interaction style.⁷¹ From an enactivist perspective, social comprehension is both performed through and the result of participatory sense-making acts. The dialogical participatory sense-making acts most often involved in the double empathy problem are the following: 1. self-control, 2. frame building, 3. incarnating communication patterns.

1. Regarding the dialogic participatory sense-making act of self-control, there is a disjunction between the autistic persons' *communication pattern* producer role and the same autistic person's communication pattern interpreter role. The autistic's producer role is more inclined to express the autistic's own sense-making while the autistic's interpreter role is more inclined to enact neurotypical sense-making patterns. This is so because production, unlike interpretation, does not incentive one to focus on the other. The consequence of this disjunction is that autistics often cannot rely on their own sense-making style to apply self-control and this leads to an inner alienation, to a high tension between the content to be expressed and the manner of expressing it. To manage this tension, the autistic has to consume more energy and incorporate neurotypical *communication patterns*; in the neurodiversity community, this manner of tension management is named masking, i.e., acting in a neurotypical manner instead of being yourself.

2. Frame building is the dialogical practice of coordinating the participants' interpretations of their previous communication patterns; these interpretations are made explicit by using reported communication patterns. Because the sense-making styles of autistics and neurotypicals are not synchronized, they lead to disjunctions in how "the social world" is experienced.⁷² Because of their difficulty in mutual coordination, the participants are less able to reach a mutually agreed upon interpretation of their previous utterances. The consequence of this is that their reported utterances are less able to be united into an intersubjectively shared interpretation frame and, therefore, the social interaction becomes less stable.

⁷¹ Milton, 884.

⁷² Milton, 884.

3. Regarding linguistic bodies' act of incarnating the communication patterns of others, the autistic, due to its upbringing in a neurotypical world, is incentivized to incarnate neurotypical communication patterns, namely, communication patterns dissonant to their autistic sense-making and participatory-sense-making style. There is also a notable difference regarding autistic and neurotypical participation genres.⁷³ While neurotypical participation genres change faster and tend to not focus on a singular theme, autistic participation genres tend to center around special interests or activities not requiring a fast co-regulation of "interactive dissonance together with [the] other participants".⁷⁴

4. Conclusion

This article has presented two apparent disadvantages of Simon Baron-Cohen's description ToM Theory and analyzed the double empathy problem hypothesis by applying enactivist concepts to this hypothesis and to those intersubjective dynamics most often involved in autistic-neurotypical social interactions. I have explored the context surrounding the battle between using enactivism and phenomenology or ToM Theory for analyzing and describing autistic-neurotypical social interactions. There is an ethical concern surrounding the usage of ToM Theory for analyzing or describing autism and that this concern has to do with the clash between the neurodiversity movement and the clinical conceptualization of autism. My aim has been to provide descriptions that facilitate enactivist and phenomenological analyses which use the double empathy problem hypothesis.

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⁷³ Heasman et al., "Towards Autistic Flow Theory," 480–81.

⁷⁴ Di Paolo, Cuffari, and Jaegher, *Linguistic Bodies*, 266.

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