CHAPTER 7

Autism and First-Person Accounts: The Cognitive Problem

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7.1 Introduction

In their recent edited volume *Worlds of Autism: Across the Spectrum of Neurological Difference* (2013), Davidson and Orsini draw attention to the extreme diversity of human thought and experience now included under the label "autism." The authors underline the growing desire to learn about autism from self-advocates, in large part because autistic individuals' representations of themselves challenge many of the assumptions about autism that scientists, clinicians, and educators continue to reproduce. These assumptions derive from the search for commonalities along the wide-ranging spectrum of autism and revolve mainly around absence and deficit: for example, the lack of a theory of mind (including empathy), impairment in executive functioning, and "weak central coherence," a particular cognitive processing style in which individuals exhibit a bias towards details or local information, and have difficulty integrating

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those details into a larger context. Whereas in the past it was thought that most people with autism could seldom understand themselves through the abstract framework of autism, nor author many insights to the scholarly study of autism, there are today dozens of first-person accounts by adults and children who self-declare as autistic; parents who recount the experiences of autistic children as involving both deficits and abilities; and also by some caretakers and scholars who published in a variety of forms (such as blogs, poetry, essays, and books) who contribute to furthering a narrative genre that helps us rethink this deficit model.[1]

We seek to compare some of these first-person accounts with ideas commonly held by experts on the subject.[2] First of all, we must make five preliminary observations. First, we sought to avoid the quarrel over the authenticity of accounts written with the aid of facilitated communication. The hypothesis of fraud regarding the texts' authorship remains, but this does not negate the value of what was written about the lived experience.[3] Second, we do not intend for these accounts to faithfully mirror the "intrinsic nature" of autism. To us, there is no "essence" or "intrinsicality" in this form of subjectification. This work seeks merely to better understand psychological expressions that bear a "family resemblance," in Wittgenstein's sense of the expression, by which we mean phenomena that may overlap, but as a group may share nothing in common. Third, the narrated cases are far from representing all subjects who participate in the autism spectrum. Many of these do not acquire the ability to communicate through personal linguistic expressions.

The fourth observation concerns the limits of this type of narrative. Many first-person accounts have a similar structure in terms of their basic constituent elements: recounting the experience of the disquiet and suffering of parents, relatives, and the subjects when faced with the first signs of what would later be diagnosed as autism; initial contacts and obstacles with educational and therapeutic professionals and equipment; the disappointment, in most cases, with the routine way with which the problem is treated; the discovery of more creative and emotionally rich means of expression than those described or prescribed by the experts' body of knowledge; et cetera. Additionally, in nearly all accounts, subjects revisit narratives of previous experiences, adding new observations. Obviously, a "first person" account is itself a particular kind of style, constructed as a convention in writing, a style that marks, delimits, and simultaneously enables the enunciation of the psychological peculiarities

of this modality of human experience. However, we could say that similar styles are enacted across multiple frameworks for communicating psychological experiences in societies that possess similar concepts of the individual and individualism. In all of them, there is a cultural imprint of the historical matrix; of the many ethnic, religious, social, professional, gender (etc.) cultures or subcultures; of academic specialties; and so on. All are inescapably present. We believe there is no way to escape the theoretical shadow of the vocabularies used to describe the autistic experience and we acknowledge that the descriptions are grounded in the long-standing ideology in Western civilization that societies are constituted by individuals, and that each individual is a discrete and complete being. Even the person suffering from psychotic delusions draws on his or her knowledge and experience in the world to create them. Thus, the fact that the study of first-person accounts requires a perspectival approach to autism does not mean that these accounts lack refined and original observations of psychological processes.

Finally, our goal is to illustrate, through the language of people with autism, how people construct their subjectivity and interpretative vocabulary. And in doing so, we are perhaps not far from much of psychiatric and psychoanalytic practice, which often relies on first-person accounts as evidence, even if clinicians also often deny that patient narratives can validate a diagnosis. We are approaching first-person accounts differently, however, to the extent that we draw on a non-medical vocabulary—namely, literature in phenomenology and philosophy of mind. Ironically, in using philosophical perspectives to think about the language of people with autism, we are performing our own estrangement from "normal" disciplinary practices in psychiatric research, and in autism research in particular.

7.2 Meanings of Autistic Experience

Understanding the meaning of the autistic experience depends largely on understanding the unusual way in which subjects communicate lived experiences to one another within their shared environment. These experiences are, in short, intentional states, processes or occurrences; that is, they represent needs, desires, thoughts, sensations, feelings, beliefs, judgments, actions, et cetera.

The meaning of autistic expressions may, for the purposes of argumentative clarity, be divided into four major dimensions: *cognitive*; *sensory-motor*; *affective* and *communicational*. We chose these four topics

due to their tacit dialogue with conventional interpretations of the autistic experience or, in more scientific parlance, the broader autism phenotype: in conventional psychiatric nosology, so-called cognitive, affective, sensory, and communicational deficits are viewed as pathognomonic signs of autism.

By communicational performance, we designate the set of physical-mental resources that enable the subject to render intentional acts comprehensible to another subject. These resources may also be described as the linguistic and pre-linguistic competence that is necessary for the agent to produce, in the interlocutor, satisfactory or unsatisfactory responses to their demands, which may be conscious or unconscious; clear or confusing; simple or complex, et cetera. This includes cases described as "social communication deficits," one of the most highly researched aspects of autism, and the subject of numerous psychometric tests, including difficulty expressing oneself, social reciprocity and turn-taking, and inability to develop meaningful friendships (Tager-Flusberg et al. 2011).

By sensory-motor performance, we designate the physical expression of the body concerning the capacity to discern internal or environmental stimuli, ordering them in "types" or "instantiations of types" with cognitive-affective value, and also the heightened sensitivities (Baranek et al. 2014). Sensory-motor performance enables us to selectively cope with things and events, due to different inclinations, needs, beliefs, desires, aspirations, et cetera.

By affective performance, we designate subjects' ability to manifest emotion, feelings or affections that are appropriate to different life circumstances. This includes all aspects of the debate on the "empathy deficit" that is supposedly characteristic of autistics. Deficits in affective performance refers to the observations that people with autism exhibit flat or neutral emotional expressions and, moreover, exhibit emotional expressions that are unusual or socially inappropriate in given contexts (Hobson 2014).

Each of these topics is extraordinarily wide-ranging and complex, and we do not wish to oversimplify them as features of autism. Nonetheless, they do represent major areas of behavior that clinicians construe as impairment and deficit, and are already codified (and, one might argue, simplified) in diagnostic tests, and in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) (2013). We should also add that in the examples we

will analyze, the four elements were isolated for didactic purposes. In intentional human conduct, they are inextricably connected.

Given both the current stage of our research and the limits imposed by the scope of an article, we will focus on examples of cognitive actions. In future research, the other aspects will be analyzed.

7.3 Cognitive Performance

We chose to analyze and, with the help of examples, question the hypothesis of a central coherence deficit. This hypothesis typically refers to the tendency in people with autism to focus in their cognitive processing on details rather than the "big picture" or integrative gestalt (Happé et al. 2001). Central coherence is a term coined by cognitivist theories to describe a supposed autonomous instance responsible for the subject's capacity to follow rules, based on systems of compulsory inferences. As Douglas Biklen critically observed, this thesis is based on the idea that the autistic subject is incapable of: (a) constructing categories, based on similarities and differences of the members of a logical set; (b) showing interest in the whole and not only in a part of a phenomenon, ultimately; and (c) deriving a gestalt of observed facts from individual occurrences (Biklen 2005, 40–43).

Scientific assumptions about a lack of central coherence continue to influence the way autistic individuals think about themselves—witness the large number of blogs and other writing in social media created by autistic individuals who identify weak central coherence (WCC) as a common deficit, even if they also sometimes challenge the assumption. There is considerable complexity and nuance in the psychological literature on WCC. Scientists debate whether WCC is distinctive to people with autism. They show elements of WCC in, for example, artists, and people with eating disorders. Moreover, scientists have also noted that WCC and other frameworks (e.g., systematizing and executive function models) are not mutually exclusive. Note, however, that considering WCC in its pure form as an ideal type, as first articulated by Frith (1989), subjects' spontaneous capacity to structure the world, based on the embodied action of perceptive interactions and sensory reactions, is reduced to an almost theoretical-epistemological operation. This unsuccessful operation would be the bedrock of their supposed inability to deal with the logic of means suited to ends or to correctly infer satisfactory logical conclusions from consistent premises.

In the psychological literature, experimental work has complicated WCC as a model that explains or essentializes individuals with autism. In this chapter, we seek to demonstrate how the hypothesis is challenged in first person narratives by subjects' capacity to offer acceptable justifications for their actions, whether manifest or merely imagined. The ability to justify satisfactorily one's own conducts is proof of subjects' rational integrity. Rationality is obviously not explicitly addressed by most studies on cognitive deficit within the autism field. However, the rational justification of conduct is the very expression of the integrity (1) of the logic of classifying things and events in the world, and (2) of the logic of valid and plausible inferences between premises and conclusions. By defining (1) X things or events as types or instances of Y things or events, or by saying (2) that A events have a logical connection with B conduct, which justify their role as motives for the latter, subjects show that their cognitive processes may be atypical,[4] but not necessarily evidence of a deficit in "central coherence."

For these reasons, in their accounts, autistic writers strive to make others understand that cognition is not a disembodied process to be judged in terms of a shared rationality derived from the consensus of "neurotypicals." As we note below, first-person accounts of autism show that autistic subjects know and seek to communicate about what they are thinking and feeling in an atypical way which is nonetheless rationally/cognitively coherent.

This view is not foreign to anthropology. Anthropologists have long validated a relativist perspective, beginning with Evans-Pritchard's classic account of Azande witchcraft beliefs as rational *in context*. Nor is this view foreign to Freudian psychoanalysis in which the reasons a person gives to explain a behavior cannot be evaluated by shared cultural expectations about what is rational or reasonable but must be understood in terms of how the ability to explain oneself structures one's psychological life.

As first-person accounts illustrate, autistic individuals not only wish to explain themselves to others but also to explain why they behave in a way that others interpret as strange—that is, they want to communicate their empathic understanding of the relationship between Self and Other. This ability is not trivial. Translating one's own subjectivity into and out of the hegemonic mental vocabulary of those who, from the autistic person's perspective, are the atypical requires an enormous cognitive effort. We will emphasize this last aspect of cognitive performance, that is, the

rational justification of conducts, desires, beliefs, et cetera, because we believe it is frequently underestimated in discussions of autism.

7.4 Fragments of Accounts

7.4.1 Attfield

Richard Attfield was one of Douglas Biklen's collaborators in his well-known work on autism. In one part of his account, Attfield says:

> I am not retarded … All my life I have been considered stupid. I understand that autistic people are intelligent and if you people admitted that you cannot understand us then perhaps we could try in a way to understand each other as fellow human beings. (Biklen 2005)[5]

The fragment speaks for itself. Attfield is not only capable of understanding what "understanding" means, he is also capable of "understanding" the reasons why he is not understood by most people around him. He knows his expressive means, the expressive means of others and can grasp, in a broad gesture of moral openness, the value in human beings' efforts to understand one another. Preconceived ideas of a central coherence deficit, as the logical ability to justify rationally the meaning of what is done, said or thought, are seriously called into question by accounts of this sort.

7.4.2 Mukhopadhyay

In his 2011 autobiographical account *How Can I Talk if My Lips Don't Move: Inside My Autistic Mind*, Tito Mukhopadhyay, a poet on the autism spectrum, states that once he was shown a toy tiger and, when asked to name the object, encountered difficulty. He thought of many things associated with the tiger, such as "carnivore, stripe, ferocious, forest, hunt, etc." but could not come up with the name of the animal until he arrived at a method of naming it: "A striped animal, which is not a zebra, is a TIGER" (115–116). Mukhopadhyay uses the object's defined description, first in its positive form—a striped animal—then in its negative form—which is not a zebra—to then use the common noun as an index of singularization. He thus shows he can resort to an atypical logical procedure that is nonetheless perfectly intelligible both to himself

and to others. He is therefore competent to generalize based on singular phenomena and to construct categories formed by elements with similar characteristics.

At other moments, he describes a peculiar way of defining common nouns. For example, "a soft petaled part of a plant is a FLOWER" (ibid.); he also adds that "a very big animal, which evolved from a mammoth, is a ELEPHANT" (ibid.). In this case, what draws our attention is not just the logic of classification and naming, but the creation of new metaphors and metonymies. Describing a flower as "a soft petaled part of a plant," and an elephant as "a very big animal, which evolved from a mammoth," shows the integrity of cognitive functions and the creativity of the definitions. The originality of the definitions is even more remarkable when we consider his ability to move to another level of abstraction and stress the importance, in his mode of comprehension, of understanding the context in which words and expressions "gain meaning" and then including a description of that process in the act of definition. He wrote:

> The story behind an object is far more important to me than the object. That is why a description of a situation becomes more important to me than the situation itself. (ibid., 54)

Such background thinking, perhaps more common than most people realize, or are willing to admit, often goes unnoticed, as if the "common noun" were a tag affixed to a product, as a matter of cognitive convenience or availability. In their everyday thinking, Mukhopadhyay and other autistic individuals excel at making a version (though non-binary) of de Saussure's classic semiotic argument that signs have significance only in relationship to other signs (1998). For most of us, the context that originates a meaning is brought to the foreground and subjected to analytical deconstruction only when the meaning is disputed. But Mukhopadhyay spontaneously carries out this process.

7.4.3 Fleischmann

Carly Fleischmann, in a biography written with her father Arthur Fleischmann, shows, like Mukhopadhyay, an admirable capacity for creating unusual metaphors, in addition to interrogating the idea of a categorical thought deficit in autism. For example:

> "What do you want to do in New York?" [Arthur Fleischmann, Carly's father] asked Carly. "The lady with the torch," she replied.(Fleischmann 2012, 173)

In another section, the dialogue is richer:

> *Caretaker*: Then if you get it, let's do a pop quiz. Name three types of birth control.
> *Carly*: Pill. Condom. Diaphragm.
> *Caretaker*: How does the birth control pill work?
> *Carly*: It tricks your body into thinking it's pregnant. (ibid., 179, 183–184)

Lastly, consider these two sentences, simple yet rich in psychological and moral resonance: "You know how people talk behind people's back? With me, they talk in front of my back" (ibid., 125).

In these examples, Fleischmann exhibits the capacity to categorically distinguish objects between types and examples—birth control as type, and pill, condom, and diaphragm as examples. Additionally, the metaphor of the Statue of Liberty and the way in which birth control acts "tricking" the body show her intellectual creativity, as she uses unusual images to describe usual things and events. The use of the expression "in front of my back" is painful. It illustrates the disregard with which we may treat people who express themselves differently from the majority and the feeling of belittlement felt by those treated disrespectfully. The majority is perceived as having a "front" and "back"—a metaphor for the rules of decorum that compel us to respect the feelings of others. The autistic subject, however, is often perceived as not entitled to the same respect. Anything can be said in front of them, even that which may come to offend or humiliate them.

7.4.4 Tammet

Daniel Tammet, in his autobiography, says he is most widely known as "an autistic savant," an unusually gifted learner who speaks numerous languages and has an extraordinary memory for numbers (once reciting more than 22,000 digits of pi in a single 5-hour period). He also has a form of synesthesia, in which numbers and letters are associated with colors. However, his remarkable intelligence for numbers and

language acquisition is not a mechanical activity. This is notable, among other things, in the justification he formulated to explain synesthesia. He states that synesthesia is a natural phenomenon that is potentially available to most people. In his case, the synesthetic potential is nearly fully developed. In support of this opinion, he turns to neuroscientist V.S. Ramachandran. He writes of a mid-century psychological test for the human disposition towards onomatopoeia in which research subjects were given artificial words and then asked to associate them to particular feelings:

> Recently, Professor Ramachandran's team has replicated the results of this test using the invented words bouba and kiki. Ninety-five percent of those asked thought the rounded shape was a bouba and the pointed shape a kiki. Ramachandran suggests the reason in that the sharp changes in the visual direction of the lines in the kiki figure mimics the sharp phonemic inflections of the word's sound, as well as the sharp inflection of the tongue on the palate. Professor Ramachandran believes this synesthetic connection between our hearing and seeing was an important first step towards the creation of the word in early humans. (Tammet 2006, 166)

Tammet suggests that his own synesthesia is just a permutation of a human capacity that exists on a wide continuum, with himself at one extreme. The propriety of this reading of Ramachandran on synesthesia is irrelevant. What is important is the improvization displayed in Tammet's cognitive operation. By naturalizing synesthesia, he creatively subverts his sensory-perceptive atypicality. His kinship with so-called "neurotypicals" is evident. There is nothing in his way of feeling and thinking that is "deficient." His abilities are typically human, only more so.

7.4.5 Higashida

Naoki Higashida, in his autobiographical account, discusses a relatively frequent behavior among autistics, repetition of the same question. About this kind of perseveration, he says:

> It's true; I always ask the same questions. "What day is it today?" or "Is it a school day tomorrow?" … I don't repeat my question because I didn't understand—in fact, even as I'm asking, I know I do understand. The reason, why? Because I very quickly forget what it is I've just heard.

> Inside my head there really isn't such a big difference between what I was told just now, and what I heard a long, long time ago … . I imagine a normal person's memory is arranged continuously, like a line. My memory, however, is more like a pool of dots. I'm always "picking up" these dots—by asking my questions—so I can arrive back at the memory that the dots represents. (Higashida 2013, 10)

Let us observe three characteristics of his account because they are reproduced by almost all authors of the accounts we analyze. Firstly, he diagnoses the cause or reason of his expressive particularity and leads us to see that the supposed "echolalia" or "linguistic stereotyping" is a meaningful act. Secondly, he explains the peculiarity of the mnemic functioning, linking together the image of a container, the storing of memories, and the usual image of a path, a progressive line in time, which is a normative image of recollection. Higashida's cognitive performance is undoubtedly exceptional, though atypical. Higashida additionally notes that, for him, language is not only about memory but is, in the simple terms, about playing with, experimenting with, sound and rhythm. The sound of certain questions is pleasurable enough to warrant being repeated. Repetition in speaking is thus not entirely dissimilar, then, from the repetition of, say, playing catch with a baseball or a Frisbee.

7.4.6 Blackman

Lucy Blackman, in her autobiographical book, explains the meaning of the echolalia in her behavior and shows the efficacy of the cognitive activity that is implicit in atypical communication forms. Speaking about the verbal habit, she says:

> … I used echolalia not as much as more fluent autistic children, but still enough to confuse the issue. I use to repeat single words to say that I agreed, because I did not use the 'y-e-s' word then. A second reason for echoing was that I did not understand. I still do that, not with a nice questioning lilt, but with a panicky flutter in my voice which is the forerunner to real stress. These days background sound in quiet places is less disorienting, so I can see this panic starting up and control it, but in places like city streets of offices full of computers and air conditioners it erupts without warning. The third reason for my echolalia has gone, thank goodness. This urge to speak spontaneously was always preceded by a patch of

> internal silence and I simply dared not leave a vacuum in the sound that I felt within my head, because I felt the word as if it were part of me and not something said by me. (2001, 42–43)

Observe Blackman's ability to distinguish between several referents of a single term and the acuity with which she operates this distinction. In the first case, echolalia appears as a substitute for words not yet learned. It therefore works as a sort of idiosyncratic synonym of the word "yes." In the second case, it is used as a defense against affect disorientation in the face of a meaning Blackman does not control, particularly the flow of intense sounds in noisy places. It is a defense, therefore, against the excess of noises and information that are onerous to her sensoperception. In the third referent, echolalia has a near opposite goal, to fill with a thought vacuum with sounds. In other words, the meaning of that which, at first glance, seems to be a pure repetition of sounds deprived of a semantic load is the effect of a similar verbal act with diverse pragmatic functions. Blackman not only uses words as we have all learned to use them, that is, in context and with diversified communicative functions. She is also able to explain the subtle difference between psychological states that justify or do not justify the idiosyncratic use of language sounds. Her ability to articulate this difference contradicts conventional notions of cognitive deficit in autism.

7.4.7 Mukhopadhyay and Barron

Both Tito Mukhopadhyay (2011) and Sean Barron, who wrote an autobiographical book with his mother Judy Barron, through these examples once again show the authors' ability to rationally justify the meaning of behaviors they recount. Mukhopadhyay and Barron both used to turn light switches and electrical appliances on and off repeatedly, which disoriented and sometimes annoyed their parents.

In Barron's account, he states that:

> I loved repetition. Every time I turned on a light I knew what would happen. When I flipped the switch, the light went on. It gave me a wonderful feeling of security because it was exactly the same each time. (Barron and Barron 2002, 20)

Mukhopadhyay offers more than one explanation for a similar behavior. He explains the compulsion for turning light switches on and off as follows:

> As I did my work with the switches, it gave me a feeling of great triumph, as if I was holding the reins of those bright dark moments in my hands. And those moments comforted me by their predictability. (Mukhopadhyay 2011, 52)

He then states that the switch's rhythmic movement enables him to better understand what is happening in his environment and asks the following question:

> And why should comprehending the environment become less fragmented if I turned the switches on or off? […] I would just see one aspect of the environment. The illuminating aspect, with a controlled probability of either bright or dark. After controlling my visual senses I would be able … to eliminate other visual distractions like shadows, reflections, and the movement of the blades of the fan. (ibid., 54)

On another occasion, he answers the question about the role of rules and routines in his everyday life, stating that:

> Rules are somewhat the very proof to an Autistic person that he exists. […] I am no exception and I get a sort of self-existing sense when I have followed a routine set of activities. […] But if I decide to switch on the lights at midnight and wake the whole house up by playing my tape recorder, just because I want to find my identity, I need to be stopped. (Biklen 2005, 126–127)

Observe their capacity to offer diverse causes and reasons to behaviors that, at first glance, are nearly indistinguishable. Barron associates the repetition of flipping the light switch on and off with the desire to find everything around him in exactly the same place. Undoubtedly, the behavior is atypical, but it cannot be classified as "stereotyped," if by stereotyped we mean mechanical movements with no meaning. A movement that seeks to create conditions for the subject to have the experience of constancy, permanence, of the vital environment is anything but "meaningless."

Mukhopadhyay also offers two other justifications for the impulse to repeat. First, the repetitive gesture is interpreted in an extremely inventive way. By controlling the light, he controls his horizon of vision in order to only see an "aspect of the environment," eliminating "other visual distractions." This cognitive strategy is similar to the

"scenic rhetoric" of theater spectacles. Through the use of spotlights, the director manipulates the gaze of the viewers, fixing their attention on the aspect of the plot he hopes to highlight. Second, he does not explain the function of repetition as filtering the environment's sensory stimuli. The behavior's meaning is not to order the environment's elements, but to strengthen the experience of recognizing his identity. Additionally, even though he understands how important it is to attain this goal, Mukhopadhyay agrees that at times others should stop him. His cognitive performance is thus more complex than meets the eye since his explanation incorporates the variable of "inconvenience to others."

7.4.8 Shore

In Stephen Shore's text, *Beyond the Wall: Personal Experiences with Autism and Asperger Syndrome*, the cognitive device is used in an original way. In discussing his compulsive tendency to mimic his brother's gestures and ways of speaking, he says: "Perhaps I had difficulty seeing myself as an autonomous being, separate and distinct from my brother" (Shore 2003, 35). He acknowledges his behavior as strange and then justifies it with an argument that is logical and makes cultural sense. Being aware of the possible lack of distinction between Self and Other and articulating this phenomenon in relation to the compulsion to mimic shows intellectual dexterity. Indeed, configuring, and communicating about, the Self as an object to be described demands a complex cognitive effort. Experiences of "agency," "authorship," "self-awareness," "self-knowledge," et cetera, all implied in everyday actions, have to be broken down so they can be cognitively transmitted. Expressions such as "seeing myself," "autonomous being," "separate and distinct," et cetera, presuppose a level of abstraction that is incompatible with the "central coherence deficit."

7.4.9 Barron

Barron had two compulsive habits that annoyed his mother. The first was repeatedly throwing pencils at the home's radiator; the second was throwing objects at a tree, without bothering to find out if the objects belonged to people who may not have wished them to be thrown. In both cases, Barron was satisfying his curiosity about ballistics. His interest consisted in discovering repeated patterns of flight behavior by

observing the time and speed of ascent and descent of objects thrown against a rigid target, situated at different heights and distances from the thrower. Barron's aggressive reaction to his mother's reproach is not easily defensible, but is nonetheless intelligible if we look at it from the perspective of his self-interest. Barron claimed that, in repeating this gestures, he felt great satisfaction, because

> This was my world and I had control over it. I controlled the object. It went up to the top of the tree because I made it happen. And if the thing I threw belonged to someone, that didn't concern me and I had nothing to do with it. When I was called names and punished, I felt invaded. I was no longer in control; someone had control over me. (Barron and Barron 2002, 45)

The conduct's intelligibility is evident. The context of meaning may seem extravagant, but, once re-described, becomes absolutely justifiable. The desire for pattern, routine, and repetition becomes understandable when we consider them as mechanisms to stabilizing the identity and the environment.

7.5 Cognition Revisited

In other words, cognition is not equivalent to mere "intelligibility," if by intelligibility we mean the capacity to competently use abstract arguments and thoughts in the dominant and ordinary language. The cognitive activity of autistic individuals, both in categorically distinguishing between things and events and in plausibly justifying intentional acts, is irreducible to the idea of a central coherence deficit or executive function deficit. As Brendan Hart (2014) has shown, communication between caretaker adults and autistic subjects occurs through the use of "prosaic technologies" such as "radical translation," "joint embodiment," and "prosthetic environment" (287). In "radical translation," caretakers translate subjects' behavior in order to signal and index what happens in the subject's internal worlds. In "joint embodiment," parents and child together create "an improvised choreography whereby parents and child prompt each another, verbally, gesturally and physically" (288). Thus, autistic subjects come to have a "prosthetic environment" in which they can express cognitive, affective, sensory-motor, and communicative functions that are necessary to developing their personalities.

What Hart describes at a socio-anthropological level corresponds to what authors such as Robbins and Aydede (2009), Gallagher (2009), and Lakoff and Johnson (1999), for example, understand to be the requirements for the expression of a "situated cognition." Robbins and Aydede break this expression down into three main notions: "embodiment, enactivism, and extended mind" (2009, 3). In their words:

> First, cognition depends not just on the brain but also on the body (the embodiment thesis). Second, cognitive activity routinely exploits structure in the natural and social environment (the embedding thesis). Third, the boundaries of cognition extend beyond the boundaries of individual organisms (the extension thesis). (ibid.)

Gallagher (2009), in turn, cites Bergson, Merleau-Ponty, Dewey, Heidegger, and Wittgenstein in his reading of the philosophical antecedents of "situated cognition" in order to show that cognition is not an isolated act of the body, the language and of other components of the physical and human environment that circumscribes the subject. To Bergson, Dewey, and Merleau-Ponty, he says, "cognition is a form of action and not a relation between a thinking that goes on in the mind and a behavior that goes on in the world" (ibid., 37). Continuing, he shows that, according to Heidegger, the subject's situationality in the world precedes and founds the conditions of cognition:

> By the time we think about things, or explicitly perceive them as what they are, we have already been immersed in their pragmatic meaning. To be pragmatically immersed in worldly contexts is to have a certain knowing relation to the world, which Heidegger calls "circumspection" (*Umsicht*) and distinguishes from theoretical knowledge. (ibid., 39)

However, in Wittgenstein's formulation, Gallagher continues,

> the meaning of a concept, and the significance of verbal and gestural actions are inseparable from the setting of actions … In a well-defined situation, a practice can be well defined not by the existence of a rule book that is consulted, or by an explicit understanding of the rules, but by the physical and socially defined situation itself … . A language and a set of concepts are created by the particular purposes involved in the situation. Thus, in contrast to traditional approaches that make concept use a matter of detached and deliberative judgment, Wittgenstein maintains that concept use is more like a practical skill. (ibid., 46)

As for Lakoff and Johnson (1999), both show that the significance or meaningfulness of a cognitive act is more than its intelligibility; it is a way of being in the world, an embodied experience of coping with the environment. Meaningfulness is the vocabulary abbreviation of a gestalt structure that gives coherence, regularity and intelligibility to the subject's action and perception. If, in positioning themselves in the world, subjects use unusual image schemata, metaphorical projections, or rational justifications they usually produce reactions of unfamiliarity in the environment.[6] This is an argument that warrants repetition and further research. As Olga Solomon (2010) points out, the subjective, the sensory, and the perceptual, are always susceptible to the power of systems of governance, such as psychiatry and psychology to order, regulate, and pathologize ideas and actions. Indeed, to some extent, autistic discourses such as those analyzed here are forms of resistance to hegemonic discourses and authority, whether specific models, such as weak central coherence and impaired theory of mind, or even science in general.

The theoretical discussion of this topic could extend far beyond what is possible within this format and the examples could be multiplied in order to illustrate the diverse facets of *cognitive integrity* present in the conduct recounted by the authors of the accounts. We would thus prefer to end this text with this eloquent poem by Birger Sellin (1998):

Je veux aussi montrer les absurdités autistiques
Mais je les interpréterai et les expliquerai aux gens
Car chaque absurdité a un sens profond comme tout
Tout chez nous revêt un sens
Notre monde n'a pas sombré pour toujours dans
L'insensé comme on le suppose
Notre monde au contraire est pareil à un système
D'antennes de sécurité né d'îles fabuleuses. (61, 62)

I also want to highlight autistic absurdities
But I will interpret and explain them to others
For each absurdity, like everything, has deep meaning
And because everything in our world has meaning
Our world has not sunk forever into the darkness
As the fool assumes
Our world is a system
Alarms, born from fabulous islands.[7]

Notes

1. Most of the accounts analyzed here are in English because the literature we are discussing largely comes from English-speaking countries where the lay movement that debates the "nature" of autism began. Since the study's objective is not the transcultural expression of autism, but rather its phenomenology, this restriction of the universe of analysis is not especially relevant. The Brazilian literature is much more scarce. It will probably be the object of investigation in a latter stage of the study.
2. We thank Elizabeth Fein and Michael Orsini for their careful reading of this text. Their critiques and suggestions have decisively contributed to the work.
3. On this discussion, see: Michael Klonovsky's 1998 "Postface" in Birger Sellin's *La Solitude du Déserteur* (229–263).
4. We will use the terms "atypical" and "atypia" in the sense of perceptive-linguistic variants of "cultural prototypes," in Rosch and Mervis's definition. The authors define prototypes as the "abstract representation of a category" (Rosch and Mervis 1975, 575). That is, a group of individuals—in the logical sense of discrete units, whether things, living beings or persons—is prototypical when its members possess family resemblances to each other. A prototype need not have a property in common with all the members of the group it represents. Its function as a representative of the category's "normalcy" or "typicality" is accepted and naturalized in everyday communication pragmatics, which always depends on contextual cultural habits. Thus, we consider that a subject is perceived as "typical" in their way of existing or expressing themselves if they present features that make them similar to the prototype's abstract imagetic or conceptual figure. On the other hand, applying terms such as "atypical," "atypicity," etc., to certain subjects means highlighting the wealth of variation of human conduct with regard to the dominant prototype, and not evaluating its forms of expression as "abnormal," "deficient," "pathological," "ill," "dysfunctional," etc. Additionally, regarding the difference between "abnormal" and "pathological" or "functional and dysfunctional," see Canguilhem's (1972) indispensable classic on the normal and the pathological, and regarding the contestation of the difference between a species' "proper function" and supposed "dysfunctional" individual variants, see the enlightening studies by Ruse (2002), Boorse (2002), Millikan (2002), Hardcastle (2002), and Cummins (2002).
5. Attfield, Richard. In Biklen (2005, 58).
6. See Johnson (2008, 1987), Lakoff and Johnson (1999).
7. Translated by Roy Richard Grinker, 2017.

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