A Phenomenological Approach to Psychopathologies: An Embodied Proposal

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Abstract: The aim of this paper is to develop a phenomenological analysis of those psychopathologies which involve an intersubjective disruption, such as schizophrenia or autistic spectrum disorder. After briefly summarizing the contemporary debate about intersubjectivity, I will emphasize the importance of the living body in the development of our understanding of otherness, and I will show two qualitative tools I have personally developed: a "phenomenological test" that takes into account specific phenomenological notions and is aimed at the analysis of the so-called *existentialia* (self, other, time, space, body); and a form of therapy focused on the fortification of intercorporeality and of bodily awareness.

Keywords: Autism, Schizophrenia, Intersubjectivity, Embodiment, Phenomenology, Interview

1. A philosophical overview on intersubjectivity

For many years, the debate about empathy and intersubjective understanding has been ruled by *Simulation Theories* (Gordon and Cruz 2003; Goldman 2006) and *Theory Theories* (Baron-Cohen 1995; Leslie 1987), approaches according to which our intersubjective understanding could be reduced to an internal simulation (in the first case) or to an inferential and merely mental process in the latter case.

In contrast to both of these tendencies—drawing on phenomenological thought, and also on Wittgenstein's contribution to the subject of intersubjectivity— many thinkers (Zahavi 2011; Gallagher 2008) instead offer an *interactionist theory*, which considers the interpersonal exchange between two subjects as necessarily incorporated. The main thesis of this approach is that there is a bodily sense of self, through which the subject can obtain a direct perception of the other, which is described, in turn, as embodied and embedded or as a "living body" inevitably entangled with the world, with which it maintains a dynamic relationship of reciprocity.

According to a phenomenological perspective¹, the body has a fundamental cognitive function, and it is considered the true core of perceptual activity, the medium that allows the subject to establish contact with the world and with the alter ego. From this perspective, intersubjective perception could be defined as an interactive—and not merely inferential—process²: accordingly, in my encounter with the other, I am not not a mere observer, but "I am responding in an embodied way" (Gallagher 2008, p.540). In this context, social cognition becomes synonymous with social interaction, a process in which the body's movements, expressions and context play a key role: the idea behind this approach is that our intersubjectivity is essentially a direct bodily process, not only during childhood but also into adulthood, and that we employ mind-reading only in exceptional cases.

Accordingly, a representational account of cognition seems to be not sufficient to

¹ Today the notion of embodiment is a critical theme in several domains. In particular, to suggest the existence of bodily roots for experiential and cognitive abilities is a thesis that covers many fields of investigation, such as cognitive sciences (Dreyfus 1972) and ecological approach (Gibson, 1979; Chemero 2009), whose focus is the link between the embodied subject and the environment. In my view, the phenomenological analysis of human embodiment cannot be divorced from the assumption of an ecological approach that makes it possible to emphasize adequately how the interaction between the body and the environment shapes the subject's perceptual experience (Zipoli Caiani 2011).

In my view, representational knowledge is not the main responsible for our intersubjective perception. On the contrary, our affectivity seems to be the result of an implicit knowing: "an embodied, intuitive knowledge of how to interact with others and so on ... a sort of temporally organized 'memory' for the dynamics which resonate in the interactions with others" (Fuchs 2016, 223). This "embodied knowledge" arises *before* higher cognitive functions. This is testified by studies in developmental psychology (see, for example, Stern 1985), but also by the analysis of the autism spectrum disorder, where the intersubjective deficit seems to derive from a disturbance of embodied interaction and not from a merely cognitive disruption (Fuchs 2016, 225).

explain our mental life. In fact, either Theory Theory or Simulation Theory are characterized by the following gaps:

Missing Experience: the role of experience is undervalued in favor of propositional attitudes and neural models. On the contrary, many studies (see, for instance, Meltzoff and Moore, 1977) have shown that from childhood on our neural system is constantly being modified by social interaction and is continuously evolving;

Missing Interaction: both the ST and TT consider social interaction a specialized skill which can be placed in the mind or brain of the individual. By contrast, a phenomenological perspective focuses on the intentional opening between two agents, and does not describe intersubjectivity in terms of a mere individual mechanism that occurs as a neural process among others. In other words, a phenomenological approach takes into account both the experiential level of intersubjective understanding, and the transcendental structure of relationality;

Missing Embodiment: the role of corporeality, that, except for the mere neural simulation process, is not taken into account by either of the two theories, which seem, instead, to postulate that the intersubjective encounter is simply a disembodied relationship between two Cartesian agents.

By contrast, from a phenomenological perspective, it is possible to affirm that intersubjectivity could involve different intertwined levels:

Co-subjectivity, that is the implicit reference to alterity, which is postulated in the perceptual experience: when the subject perceives an object, the absent profiles are co-intentioned *as if* they would be perceived from another perspective, another "here-and-now". This kind of intersubjectivity precedes the effective encounter with the other and could be defined as a fundamental individual structure ³;

³ Zahavi describes this kind of intersubjectivity as an "open intersubjectivity" (Zahavi, 1997).

The effective face-to-face encounter, which allows for the analogical argument and the apperceptive transposition. After this encounter, the subject is destabilized because he understands he is just one orientation center among others and not the only one. Furthermore, the world becomes objective: in fact, I realize that reality does not exist only for me and is not mere *appearance*, but concrete existence that transcends my own subjectivity;

The anonymous community, which we can also define as "sensus communis" and which involves norms, values and shared cultural issues. In other words, this level of intersubjectivity is a sense of belonging to a community or a group that transcends the individual while permeating every moment of her life.

It seems clear how intersubjectivity is not a mere encounter with another individual, but involves different experiences, whose primary ground is the capability to communicate and to conceive other subjects completely different from ourselves. From a genetic perspective, we could affirm that a disturbance of co-subjectivity involves problems at other levels too, through an "avalanche effect" which is more or less serious according to the pathology.

In this context, my thesis is that intersubjectivity is grounded in corporeality, which seems to be "the phenomenal ground of synchretic sociability, pathethic identification, or, in a word, intersubjectivity" (Dillon 1997, p.122).

2. Schizophrenia and Autism as (inter)corporeal disorders

2.1 Schizophrenia

As noted by Minkowski (Minkowski, 1927), in schizophrenia the self and the other are not mutually interrelated, but diverge to such an extent that they can be considered two completely separate ontological realms. The subject perceives a sense of loss of her own boundaries, together with (auditory and visual) hallu-

cinations and the impossibility of controlling her actions: in other words, the "corporeal schema" described by Merleau-Ponty in *Phenomenology of Perception* seems to be disrupted.

The cause of these symptoms has been traced to the loss of the so-called "corporeal Self" (Fuchs, 2005, 2015, Fuchs & Schlimme 2009; Stanghellini 2006): a pre-reflective, bodily and immediate awareness which is the ground both for our self-perception and for our social attunement.

Recent empirical studies have shown that this *corporeal* feeling is present from the first years of our life, allowing for abilities like proprioception, perception and emotion.⁴ In schizophrenic subjects we can register a progressive alienation from their own bodily feelings, and, accordingly, the impossibility of discerning from the self and the alterity. The body becomes alien, fragmented: the subjects often claims that her own body feels mechanized or deanimated, and for this reason she is incapable of feeling herself like a human being who belongs to a common and shared reality⁵.

Furthermore, we can claim that what is lost is very similar to the Husserlian *natural attitude*: "the pre-thematic and non-objectivating consciousness of the pre-giveness of the world" (Summa 2012, p.194) which the subject usually experiences in the same way as other subjects and which corresponds to "what is taken for granted, prior to all scientific thought and all philosophical questioning" (Husserl 1970, p. 110). Losing these abilities necessarily involves what Blankenburg describes as a loss of natural self-evidence, or common sense. The reason behind this assumption is that this practical, embodied and embedded knowledge represents the ground of our being-in-the-world, of our pre-understanding of everyday

⁴ I mean, for instance, the studies by Meltzoff and Moore (Meltzoff & Moore, 1977; or Moll & Meltzoff 2010). According to Meltzoff, a *corporeal* attunenement is the constitutive ground for social understanding from its first step (sharing perspective) to the more complex level of understanding. In other words, our pre-reflective and corporeal sense of self is immediately linked to intersubjectivity and it allows us to have both proprioception and the perception of alterity.

⁵ One of the main loss of schizophrenic patients is the lack of common sense (cf. Hipolito, Goncalves, Pereira 2017).

situations, a condition that is disrupted in schizophrenia. The result is a fundamental alienation of common sense and intersubjectivity, and the loss of the basic sense of self and of being-with-others.

In her autobiography, Elyn Saks claims: "[one] of the worst aspects of schizophrenia is the profound isolation — the constant awareness that you're different, some sort of alien" (Saks, 2007, pp. 193). Like Anne Rau, Blankenburg's famous schizophrenic patient, she perceives herself as *ontologically different* from others, "not really human" (*Ibidem*).

As a matter of fact, we should note that our sense of self is bound up in our the sense of others, and for this reason the disembodiment of self and the disruption of intercorporeality mutually influence each other, causing us to lose our tacit attunement to the world and situations.

Another symptom is an *analytic perception* of reality: in other words, the subject is not able to perceive things as wholes, but focuses on one particular element only. Phenomenology seems to be helpful in the explanation of this phenomenon too: in fact, we can claim that what is lost is the *passive synthesis*, the pre-reflective ability of unifying different objective apprehensions which are the result of distinct sensorial spheres (for instance, the tactile stratum as well as the visual one). In this case we can also register the loss of common sense, and the fragmentation of the boundaries between the self and the world.

All of these symptoms seem to belong to an experiential domain and cannot be reduced to a mere neural disruption. In other words, in schizophrenia we can point out different but intertwined explanatory levels:

A *neurobiological* analysis, according to which there are many disruptions or lesions, especially in the mechanism aimed at the intramodal integration of signals, the region which is usually connected to the motor system (Gallese, Ferri 2013);

A *transcendental* approach, for which there is a general disturbance of the passive synthesis which is the main cause of the fragmentation of perception and of the laceration of the temporal transcendental structure;

A *phenomenological* overview, which focuses on the lived experiences of the patient and on the description of the so called *existentialia*, which are those subjective structures (self, other, time, space, body) whose main ground seems to be the *lived body*. According to this kind of analysis, the loss of bodily gestalt (constituted by the ongoing deconstruction of bodily cenesthesia and the popping up of unrelated and decontextualized body parts); the itemization of space; the fragmentation of time experience and the impossibility of attunement with others and with the shared world are synonymous with a *disembodiment* of the pre-reflective and corporeal self.

A phenomenological account is therefore able to explain⁶ such ontological changes and the loss of gestaltic coherence which is experienced by the subject, as well as the essential link between the self and the other, which are mutually related and intertwined in a "corporeal" way.

2.2. The autistic spectrum disorder

Another pathology that I have taken into account in order to clarify and support the existence of this pre-reflective and corporeal Self, and its role in intersubjectivity, is autism, a social pathology par excellence. Especially in this case, Simulation Theory and Theory Theory are insufficient to explain the complexity of this disease.

According to Theory Theories, autism is caused by a lack of a theory of mind, that is, the inability to confer mental states to others (Happè 1994).

⁶ We should note that phenomenology has always been characterized as a purely descriptive enterprise, focusing on the *eidos* of things: to quote Moran, "Phenomenology may be characterized broadly as the descriptive science of consciously lived experiences and the objects of these experiences, described precisely in the manner in which they are experienced" (Moran, 2012, quoted in Sass, 2014, p.366). Following the thought of Sass, it seems to me that, especially in the analysis of psychiatric pathologies, the descriptive aim could be helpful also in the explanation of such pathologies. In other words, the eidetic description could contribute to the explanation both the genesis and the structure of human experience: genetic and static phenomenologies can work together in the analysis of pathologies (cfr. Sass, 2010)

It has been assumed that this capability is already present in four-year-old children who are able to pass the false beliefs test. The main problem with this hypothesis is that it is unable to explain the other symptoms of autism (such as repetitive actions, specific interests and so on) and that it does not emphasize the importance of emotion, an element that, from my perspective, is very important indeed⁷.

Furthermore, we cannot reduce autism to a mere lack of cognitive abilities, since many autistic subjects do have a theory of mind.

According to Simulation Theories, autism seems to be a behavioral disease. In fact, human activity seems to be divided into two macro-species: empathizing and systematizing. In this view, autistic subjects have difficulty empathizing, while their systematizing capabilities are hyper-developed. This "would provide strong evidence for ST, because it would show that a major clinical population known to be deficient in mindreading is also deficient in the use of simulation for mindreading" (Goldman 2006, p. 125). Goldman, in particular, claims that "it is precisely a deficit in interpersonal mental simulation, also called empathizing, that seems to characterize autistic individuals" (*Ibidem*). Nonetheless, a simulation theory's approach seems to be excessively reductionist and simplistic towards mental illness, because it does not take into account the fact that what is affected is the whole *person*, conceived as a dynamic and intentional self.

While TT and ST are not able to explain autism, a phenomenological perspective seems to be suitable to this task. In fact, intersubjectivity could not be reduced either to a mere cognitive process or to a mere non-inferential, subpersonal mechanism. We also need to take other elements into account, such as

Nowadays, phenomenologists and scientists are increasingly focusing their attention on *body movement*: according to Edelman, for example, movement is instrumental to the knowledge of the world, while the American philosopher M. Sheets-Johnstone argues explicitly that "cognition is not separated from perception, perception is not separated from an environment nor from a larger category designated as a behavior: on the contrary, the movement-perceptual system *is* behavior in the sense that it is the actual 'real-time', 'real-life' event as it unfolds" (Sheets-Johnstone 1999, 218). In other words, the cognitive process seems to have *affective* features: the movement seems to be the first communication resource. Motor activities, as well as emotional experiences, seem to be primary resources for the knowledge of the world, before the arising of more complex cognitive abilities, whose proper functioning seems rather to derive from them.

context, which informs our understanding of others (Gallagher 2008)⁸. Husserl, Scheler and Merleau-Ponty have underlined the importance of the pre-reflective and pre-predicative experience, as well as the centrality of living corporeity in the face-to-face encounter: starting from these notions, Gallagher has proposed an *interaction theory*, a vision of intersubjectivity as a multi-layered experience that could be divided into *primary and secondary intersubjectivity*.

In the case of primary intersubjectivity, we refer to that innate ability to relate to others which is expressed at the level of perception starting from birth, when the baby sees the actions and movements of others and begins to imitate them. With this in mind, the process would seem to resolve itself within the intersubjective direct encounters with the other, and in particular with his living body: bodily expressions and gestures seem fundamental in the development of the understanding of otherness. These interactions involve the ability to distinguish between the self and others and the proprioceptive sense of one's own body (Gallagher 1996, Tsakiris 2017), as well as the ability to discern between animate and inanimate beings (Kaduk, Elsner, Reid 2013). Having a theory of mind is therefore not contemplated, nor does it appear useful at this early stage. The other is perceived as an intentional agent that uses our own expressive language.

This innate capacity allows the infant to interpret — perceptively, not theoretically — the body movements of the other: Baron-Cohen (Baron-Cohen 1995) has called this capacity *intentionality detector*. In phenomenological terms, we can argue that this kind of intentionality is the pre-reflective and bodily intentionality that enables us to be ontologically

⁸ It is interesting to notice that already in 1967, Tillman elaborated a theory of perception stressing not only the role of "intersubjective corporeal" behavior, but also the function of context: "Our body is at one and the same time the medium of our emotion and our articulation of it. Even though some of our gestures are causally related to internal and visceral changes, and our gestures themselves are mostly conditioned by our musculature, our ability and skill intervene. Our gestural movements conform to certain social conventions. " (Tillman, 1967, 167). Like Scheler, the author in question takes into account both corporeal expressions and socio-cultural conditioning, and he claims that "Our bodily behavior acquires a socially shared meaning." (*Ibidem*).

open to the world⁹. Within this characterization, it is possible to trace another feature singled out by Baron-Cohen (Baron-Cohen 1995): the *eye-detection detector*, which is the ability to follow the gaze of others and consider it significant. Also in this case, phenomenology seems to provide suitable explanations. As argued by Scheler, our initial perception of otherness is not rational, rather, it implies cognition of body expression and sensory-motor capacities: in fact, the infant is able to perceive the meaning of expressions thanks to a universal grammar of expressivity provided by the *Leibschema*. Integrating the Schelerian theory with observations furnished by developmental psychology (Maiese 2013; Trevarthen 1979, 2005), we could very well argue that bodily and motor elements allow the subject to establish an initial connection with otherness. In this context, corporeality plays a fundamental role: not only do we see the rage in expressions and movements of others, but it is as if we personally feel the rage with our own body. Therefore, our being embodied seems to be the necessary condition for the arising of an empathic attunement with the other.

The passage from sharing to understanding others' perspectives, according to studies by Melzoff and Moore, is gradual and stabilizes around the age of four or five: in other words, our perception of the other is not confined to the primary intersubjectivity. As early as the age of one year, in fact, we can observe the transition from simple face-to-face meeting to what Baron-Cohen has described as a *mechanism of joint attention*: the subject learns to understand the meaning of things, going from dyadic to triadic relations (or intersubjective situations involving the use of objects (cf. Moll, Tomasello 2007). This "level" of intersubjectivity goes beyond the mere encounter with otherness, and it implies imaginative and inferential capacities.

Hobson describes the passage from one to the other kind of interpersonality which is precisely defined as *secondary intersubjectivity*— as follows:

The defining feature of secondary intersubjectivity is that an object or event can become

⁹ The pre-reflective, bodily intentionality is not the only one condition, but we need to take into account other elements: in fact, in the tradition of philosophical anthropology, eccentric positionalism (reflexivity, cf. Plessner 1975) or the reduction of instincts (Gehlen 1988) are further aspects that have a role in the arising of subjectivity's intentional openness.

a focus *between* people. Objects and events can be communicated about...the infant's interactions with another person begin to have reference to the things that surround them. (Hobson 2002, p.62)

At the end of a complete and comprehensive description of the intersubjective process, it seems so obvious that neither a reduction in mental or abstract mechanisms, nor a mere focus on context, is possible: rather, primary and secondary intersubjectivity seem to be two phases of a single process which includes both sensory-motor experiences and contextual, pragmatic abilities. As noted by Fuchs (Fuchs 2015) we can also point out a *tertiary intersubjectivity* when infants begin to perceive others as intentional agents and they develop a self-other meta-perspective. Accordingly, we can claim that intercorporeality is a multilayered process which requires an integrated account consisting of several perspectives.

This complexity is also evident in the first stage of autistic disorder, a disturbance that seems to affect not only the cognitive abilities of the subject, but also the so-called *praktognosia* (i.e. the capability to relate to the world in a practical sense and not purely theoretically). Following a phenomenological perspective, and keeping in mind what it means to have an intersubjective relation according to this approach, the autistic disorder seems to be a disorder that affects the social skills of the subject as early as the *co-subjectivity*¹⁰ by eroding the embodied interaffectivity and, thus, also social inferential capabilities. In other words: a disturbance at a pre-reflective, embodied level causes disruptions in intersubjective, perceptual abilities (the subject is not able to establish a direct link with the external world) and, accordingly, cognitive capacities will be impaired as well. The deficits of the autistic patient can, in fact, be identified start-

¹⁰ Co-subjectivity is our first intersubjective level which presupposes embodiment since it needs an orientation center (an "here and now") that works as the "zero point" of perception and allows the subject to infer the existence of object's absent profiles. This can be considered the very first intersubjective manifestation, because it implies the capability to conceive a perspective different from mine. This level will reveal its centrality also in further intersubjective stages (such as joint attentionality) which also involve other important cognitive elements.

ing from primary intersubjectivity: very often, you can observe disturbances in sensory-motor integration, gestalt perception and imitative capacities. As a result, secondary intersubjectivity, which involves the development of higher cognitive abilities, will find great difficulties. This characteristically deficits can be observed on different explanatory levels:

A *neurobiological* disturbance. There are several neural anomalies which make the subject unable to synthesize visual, motor and kinesthetic information into one whole experience (the phenomenon of canalesthesia); an impaired assignment of the affective significance of stimuli and an abnormal organization of temporal and parietal polysensory regions (Waterhouse et. al. 1996). These anomalies can be traced to the neural area which involves the mirror neuron system (Ramach-andran, Oberman, 2006). Also, the process of apoptosis, which is the natural "dispersal" of excessive neurons, seems to be disrupted, causing problems in the processes of facial recognition and emotional perception. In other words, there are many disturbances in the motor-sensorial area;

A problem of *coherence*. From a transcendental perspective, we can note that the subject is not able to perceive in a gestaltic manner¹¹ (like schizophrenia, what is missing is the passive synthesis);

A disturbance of the *embodied social perception:* a phenomenological approach sheds light on the fact that, as in schizophrenia, all of these dimensions are synonymous with a disruption of the bodily (and intersubjective) sense of Self, in other words, of our *lived body*.

¹¹ The complexity and the importance of this deficit is testified by the fact that we can even register the neural correlate of this deficit in the lacking integration of neural stimuli. Of course, the problem is not circumscribed at the neural level, but permeates both the experiential and the cognitive life of the subject.

3. A phenomeological interview

I have tried to put my assumptions to the test by means of a "phenomenological interview" which I had the opportunity to conduct with an Asperger's subject.

From a methodological point of view, the phenomenological interview seems to better suit the investigation of the structures of subjectivity that are disrupted in the pathology. The advantage is a second-person perspective, which is "a position" that

is not that of a neutral anthropologist; it is rather one of a coach or a midwife. His/her trade is grounded on a sensitivity to the subtle indices of his interlocutor's phrasing, bodily language and expressiveness, seeking for indices (more or less explicit) which are inroads into the common experiential ground [....] Such encounters would not be possible without the mediator being steeped in the domain of experiences under examination, as nothing can replace that firsthand knowledge. (Varela & Shear 1999, p.10)

In other words, lived and first-person data are privileged with respect to scientific analysis¹².

The phenomenological notions that I have taken into account are:

bracketing, *(epochè):* I asked the subject to bracket all of his prejudices and previous knowledge in order to free his intimate Self;

"going back to the things themselves": the purpose of the interview was to acquire detailed first-person descriptions of the experience of the subject;

¹² Especially in the analysis of pathologies, we should consider the patient as a person, and not as a biological organism (Polanyi 1962). The duality of man presupposes two interrelated approaches: the experiential one, *and* the scientific one, with its intersubjective stances and rules.

invariant structures: the analysis was explicitly committed to finding his *existentialia* (space, time, body, self, other¹³);

the importance of the *living body*, the very object of my research. In this case, I have tried to find the role of the body in relation to alterity.

The interview started with a test I formulated personally and which consists in the visualization of 25 pictures which are in the focus of the analysis. The subject could choose from among four options: the first two (1, 2) were related to one of the subjective structures I wanted like to analyze (in a negative and positive way, for instance Love or Incommunicability), the latter two (3,4) concerned other cognitive abilities and details (for instance, physical laws and colors). During the first stage, I asked to the subject to complete the test according to his own suggestions; in the second phase of the interview, I asked him what he thought the painters or photographers wanted to represent through their creations. In this way, I tried to analyze his capacity of take another's point of view. Following this, I conducted a semi-structured interview using the pictures as stimuli and questions about beliefs and emotions, trying to explore his subjectivity in a quasi-direct manner. Privileging *reciprocity*, it happened that the subject moved up my questions, as well as my questions adapted to his statements. In order to make the test scientifically valid, I also interviewed a "normal", 18-years-old male subject.

3.1 "A spontaneous transgressive"

M. is an 18-years-old male with Asperger's syndrome. He self-diagnosed his disorder one year ago, but when he was a child, he was labeled an "emotional disturbed subject". His very high I.Q. (139) allows him to live an almost normal life, although he suffers from isolated crisis due to anxiety and obsessive thoughts. His Asperger involves difficulties in communication and the development of

¹³ The so-called *existentialia* are universal matrices that every man shares with all the others. These basic structures remain in the background and constitute the life-world of the patient, that is disrupted in mental pathologies.

specific areas of interest (both typical features of autism).

Talking to him was very fruitful for my research because it allowed me to observe a pure lack of empathic attunement.

Specifically, while M. successfully demonstrated being able to understand others' perspectives—his descriptions of artists' intentions are very detailed and coherent with the meaning of the pictures— his responses about his own impressions were very peculiar: in fact, he gave a majority of 3 and 4 answers, where the typical development subject answered using the first two options. In other words, M. completely ignores the data which refer to his subjectivity.

Another important difference concerns the use of language: while the neurotypical subject used metaphoric language, M. affirmed that language represents one of his major problems. In fact, he does not understand the ambiguities involved in everyday communication. I think that this could be read as a manifestation of his lack of common sense. In fact, he has problems not only in the relational use of language, but also in the understanding of corporeal gestures. In the test *Reading the Mind in the Eyes* (Baron-Cohen et al., 1997) he obtained a very low score because he was not able to associate specific expressions to determinate emotions. In fact, he cannot understand intersubjective situations which involve emotional components and the shared meaning of language and conventions.

He describes himself as *a spontaneous transgressive*, a person who has a peculiarity in his way of thinking and in his practical behavior. His social life consists in organized events because he is not able to "improvise". Also, his apparently paradoxical religious faith could be read as such: religion represents a "ready made" system with its own rules and values that M. passively adopts. In fact, he claims that he is interested in ideal values, but that they do not involve him emotionally. Ideals "remain in thoughts, not in the feelings". His life is articulated by "rational" periods and "emotional" moments: in the first case, he tends to think continuously, in the second

he is dominated by anxiety. In any case, emotion and reason are two elements that absolutely cannot coexist in his interiority. According to me, both of these excesses are attempts to compensate for a lack of common sense, analyzing reality through rationality or sensitivity.

His disorder seems to be all but cognitive: on the contrary, it seems to belong to a pre-reflective domain. As a confirmation to my hypothesis, he seems to lack some features specific to corporeity, such as relationality, and he also said that sometimes he thinks that others could read in his mind, but that they pretend not to (the phenomenon of *transitivism*, cfr. Fuchs 2015). Furthermore, he hates corporeal contact because he perceives it as an invasion: all of these elements support the thesis according to which his corporeal and pre-reflective self is very weak and disrupted, causing problems in the perception of others and the world.

4. Conclusion: An embodied therapeutic proposal

To summarize, a phenomenological analysis has allowed me to conclude that:

Our Self is corporeal;

Our intersubjectivity does not foremost depend on mentalization or simulation, but on pre-reflective (and corporeal) elements.

Following this perspective, I support a particular kind of therapy focused on the fortification of intercorporeality and of a psychophysical sense of self. I have called this approach D.I.R.E., with an explicit link to the D.I.R. model proposed by Stanley Greenspan and Serena Wieder in 1997 for the treatment of autistic patients¹⁴. The central idea is that the treatment should be focused on Develop-

Greenspan, 1997, but also Greenspan & Wieder 1998; 2001. Even if the D.I.R. model is aimed to the therapy of autistic patients, I think that my modified version (D.I.R.E.) could be useful in the treatment of schizophrenia too, not only because it takes into account corporeality, which seems to be the main disrupted dimension of this pathology, but also because autism, conceived as the loss of social attunement, could be read as a feature of schizophrenia (see Ballerini, 2002).

ment, Individual difference and should be Relationship-based. I argue for the importance of Embodiment too, in order to strengthen the sense of the essentially intersubjective self that seems to be disrupted in autism and schizophrenia.

The decision to modify Greenspan and Wieder's model was motivated by the fact that their approach shows several interesting similarities with phenomenology. Greenspan, in particular, has developed the *"affective diathesis hypothesis*," according to which cognitive deficits in autism are caused by a motor and affective deficit (already present in primary intersubjectivity). In other words, he supports an epistemological reversal in favor of the pre-reflective domain, emphasizing the importance of praktognosia and not the possession of a theory of mind or of a mere simulation mechanism. Furthermore, the D.I.R. model is essentially a *psychobiological* proposal, and I found it very coherent with my general approach to psychopathologies, which takes into account both the neurobiological level and the phenomenal level, and supports the thesis according to which we need a holistic perspective on mental disorders.

Like phenomenology, this approach focuses on the importance of:

Intentionality: Like the phenomenological tradition, this perspective sheds lights on the fact that the subject must have an emotional directness towards the world;

Reciprocity: The subject is constantly oscillating between her first person perspective and the second person perspective, between her individuality and intentional openness. This is clear in schizophrenia, where self-awareness and the possession of common sense are mutually related, but also in autistic spectrum disorder, a disturbance where the inextricability between the self and the alterity dramatically emerges;

Emotions: Relationships should be characterized emotionally and axiologically. This is consistent with Scheler's and Merleau-Ponty's perspective: while Scheler talks about an axiological a priori which is given thorugh

affective perception (*Fühlen*), Merleau-Ponty emphasizes the priority of pre-re-flectivity in intersubjective understanding¹⁵.

Accordingly, the authors argue that, in order to help people affected by autistic spectrum disorder, the therapist should try to develop their *practical and emo-tional* understanding of the world. At the center of their model is the so-called "*floortime*": a spontaneous interaction between the autistic child and the adult, which is helpful for the improvement of motor and social skills. In my proposal, *embodiment* is another element that a therapy should take into account for the development of self-awareness and, accordingly, the improvement of intersubjective skills. This could be achieved in several manners. For instance, the practice of dance could be used to improve self-awareness and kinaesthetic abilities: in fact, as argued by M. Sheets-Johnstone, movement and perception are ruled by "non-linguistic corporeal concepts" (Sheets-Johnstone 2009, p.151).

In the same way, virtual reality devices seem to be able to simulate sensorial, corporeal experiences through 360° videos: this could be useful in the treatment of certain hospitalized patients¹⁶ or for the strengthening of intersubjective abilities in autistic patients. In fact, VR simulations can elicit a sense of presence of otherness and can simulate sensorial activities¹⁷, and could be used not only for analyzing the subject's sense of (bodily) self, but also for training her social skills, enhancing embodied awareness and recreating the intentional link between the subject and the world.

The D.I.R.E. proposal can be conceived as a sort of "*transformative somatic practice*" (Behnke 1988, Hanna 1988) that is a kind of approach whose focus is body

¹⁵ The intimate bound between an emotion and its expression, which is perceived by an observer, is exemplified by the fact that in the blushing we immediately perceive shame, as well as in a particular grimace we can perceive anger. The felt emotion and its expression should thus be considered as a unitary pre-reflective phenomenon rather than two distinct elements.

¹⁶ For instance, it has been noted that patients suffering from chronic pain feel better when they are busy in playing with virtual reality devices, since their corporeal schema is focused on the 360-degree environment and intentionally directed beyond their biological bodies (cfr. T. Jones et al. 2016).

¹⁷ Virtual reality can be considered a copy of reality thanks to a strong sense of presence, elicited by the *naturalness* of the simulated environment: in this manner, there may be the conditions for a transfer of the acquired skills in the real world; furthermore, the safety of this virtual environment facilitates interactions with virtual objects and social agents and elicits tasks which require joint attention (Faita et al. 2017).

work and body awareness: taking into account both the fact that the subject is essentially a psychophysical organism, a *living body*, and the fact that his nature is ontologically *intersubjective*, a phenomenological analysis is therefore really suitable not only in explaining (inter)subjective disorders, but also in finding possible directions for their treatment.

Ethical statement

I obtained an informed consent from the interviewed participants.

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Bibliography

A. Ballerini, *Patologia di un eremitaggio. Uno studio sull'autismo schizofrenico*, Torino: Bollati Boringhieri, 2002;

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

S. Baron-Cohen, T. Jolliffe, C. Mortimore & M. Robertson: "Another advanced test of theory of mind: Evidence from very high functioning adults with autism or asperger syndrome" in *Journal of Child Psychology* and Psychiatry. 1997, Vol. 38, pp. 813–822;

E. Behnke: "Matching" in Somatics. 1988, Vol. 6. no 4, pp. 24-32;

M. Bellani, L. Fornasari, L. Chittaro, P. Brambilla: "Virtual reality in autism: state of the art" in *Epidemiology and Psychiatric Sciences*. 2011, Vol. 20 no. 3, pp. 235-238;

W. Blankenburg, Der Verlust der natu rlichen Selbstverständlichkeit. Ein Beitrag zur Psychopathologie symptomarmer Schizophrenien. Stuttgart: Enke, 1971;

A. Chemero, *Radical Embodied Cognitive Science*. Cambridge (MA): MIT Press, 2009;

M. C. Dillon, *Merleau- Ponty's Ontology*. Evanston, IL: Northwestern University Press, 1997;

H. Dreyfus, *What computers can't do. A critique of artificial intelligence*. New York: Harper & Row, 1972;

C. Faita, R. Brondi, C. Tanca, M. Carrozzino, M.Bergamasco: "Natural User Interface to Assess Social Skills in Autistic Population" in *Augmented Reality, Virtual Reality and Computer Graphics.* Berlin: Springer, 2017, pp. 144-154;

T. Fuchs, H. De Jaegher: "Enactive Intersubjectivity: Participatory Sense- Making and Mutual Incorporation" in *Phenomenology and the Cognitive Sciences*. 2009, Vol. 8 no. 4, pp. 465-486;

T. Fuchs: "Corporealized and Disembodied Minds: a Phenomenological View of the Body in Melancholia and Schizophrenia" in *Philosophy, Psychiatry and Psychology*. 2005, Vol. 12, pp.95-107;

T. Fuchs: "Embodied Knowledge, Embodied Memory." In S. Rinofler-Kreidl, A.H Wiltsche (Eds.), *Analytic and Continental Philosophy. Methods and Perspectives.* Berlin: De Gruyters, 2016, pp.215-229;

T. Fuchs: "Pathologies of intersubjectivity in autism and schizophrenia" in *Jour*nal of Consciousness Studies. 2015, Vol. 22 no.1-2, pp. 191-214;

T. Fuchs, J. E. Schlimme: "Embodiment and Psychopathology: A Phenomenological Perspective" in *Current Opinion in Psychiatry*. 2009, Vol. 12(b), pp. 570-575;

S. Gallagher: "Direct Perception in the Intersubjective Context" in *Consciousness and Cognition*. 2008, Vol. 17, pp. 535-543;

S. Gallagher, D. Hutto: "Primary Interaction and Narrative Practice." In J. Zlatev, T. Racine, C. Sinha & E. Itkonen (Eds.), *The Shared Mind: Perspectives on Intersubjectivity*. Amsterdam: John Benjamins, 2008;

.S. Gallagher, A. N. Meltzoff: "The earliest sense of self and others: Merleau-Ponty and recent developmental studies" in *Philosophical Psychology*. 1996, Vol. 9 (1), published online

https://dx.doi.org/10.1080%2F09515089608573181;

V. Gallese, F. Ferri: "Jaspers, the Body, and Schizophrenia: The Bodily Self" in *Psychopathology*. 2013, July 17, pp. 1-7;

A. Gehlen, *Man, His Nature and Place in the World*, New York: Columbia University Press 1988;

J. Gibson, *The Ecological Approach to Visual Perception*. New Jersey: Lawrence Erlbaum Associates 1979;

.A. Goldman, Simulating minds: the philosophy, psychology, and neuroscience of mindreading, New York: Oxford University Press 2006;

R. Gordon, J. Cruz: "Simulation theory" in *Encyclopedia of Cognitive Science*. 2003, London: Nature Publishing;

S. Greenspan, *The Growth of the Mind and the endangered origins of intelli*gence. Reading, MA: Addison Wesley Longman 1997;

S. Greenspan: "The Affect Diathesis Hypothesis: The Role of Emotions in the Development of Intelligence and Social Skills" in *Journal of Devel*-

opmental and Learning Disorders. 2001, Vol. 5 no.1, pp. 1-45;

S. I. Greenspan & S. Wieder, *The Child with Special Needs:Encouraging Intellectual and Emotional Growth.* Reading, MA: Perseus 1998;

T. Hanna, *Somatics*. Reading, MA: Addison-Wesley, 1988;

F. Happè: "An advanced test of theory of mind" in *Journal of Autism and Developmental Disorders*. 1994, Vol. 24 no. 2, pp. 129-154;

I. Hipolito, G. Goncalves, J. Pereira (eds.), *Schizophrenia and Common Sense: Explaining the Link Between Madness and Social Values.* Berlin: Springer Studies in Brain and Mind, 2017;

P. Hobson, The cradle of thought. London: Macmillan, 2002;

E. Husserl, Ideen zu einer reinen phänomenologischen philosophie. Zweites Burch. Den Haag: Martinus Nijhoff, 1952;

E. Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Tr. D. Carr). Evanston, IL: Northwestern University Press, 1970;

T. Jones, T. Moore, J. Choo: "The Impact of Virtual Reality on Chronic Pain" in *PLoSONE*. 2016, Vol. 11 no. 12, pp. 1-10;

K. Kaduk, B. Elsner, V. M. Reid: "Discrimination of animate and inanimate motion in 9-month-old infants: an ERP study" in *Developmental Cognitive Neuroscience*. 2013, Vol. 6, pp.14-22;

A. M. Leslie: "Children's understanding of the mental world" in R. L. Gregory (ed.) *The Oxford Companion to the Mind*. Oxford: Oxford University Press, 1987, pp. 139-142;

M. Maiese, Autism, Empathy and Affective Framing in Philosophy of Autism. United Kingdom: Rowman & Littlefield Publishers, 2013;

M. Merleau-Ponty, Phénoménologie de la perception. Paris: Gallimard, 1945;

A. Meltzoff, K. M. Moore: "Imitation of facial and manual gestures by human neonates" in *Science*. 1977, Vol. 198, pp. 75-78;

E. Minkowski, La schizophrénie: psychopathologie des schizoides et des schizophrènes. Paris: Payot, 1927;

M. Moll, and A. N. Meltzoff: "Perspective taking and its foundation in joint attention" in J. Roessler (ed.) *Perception, causation, and objectivity. Issues in philosophy and psychology.* Oxford: Oxford University Press, 2010;

H. Moll, M. Tomasello: "How 14- and 18- month-olds know what others have experienced" in *Developmental Psychology* 2007, 43, pp. 309-317;

H. Plessner, Helmuth, Die Stufen des Organischen und der Mensch. Einleitung in die philosophische Anthropologie, 1975. In G. Dux et al (ed.), Gesammelte Schriften (GS). Frankfurt am Main: Suhrkamp, vol. V, 1980-1985;

M. Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy*. London: Rouledge and Kegan Paul, 1962;

S. Ramachandran & L. M. Oberman: "Broken Mirror. A theory of autism" in *Scientific American*. 2006, pp.62-29;

E. R. Saks, The Center Cannot Hold. New York: Hyperion, 2007;

L. Sass: "Explanation and Description in phenomenological psychopathology" in *Journal of Psychopathology*. 2014, 20, pp.366-376;

M. Scheler, *The Nature of Sympathy*, transl. by P. Heath. New York: Archon Books, 1970;

M. Sheets-Johnstone, *The Corporeal Turn*. Exeter: Imprintic Academic, 2009;

M. Sheets-Johnstone, *The Primacy of Movement*. Amsterdam: John Benjamins Publishing Company, 1999:

G. Stanghellini, Disembodied Spirit and Deanimated Bodies. Oxford: Ox-

ford University Press, 2006;

D. Stern, The interpersonal world of the infant. New York: Basic Books 1985;

M. Summa: "Is This Self- Evident? The Phenomenological Method and the Psychopathology of Common Sense" in *Rivista Internazionale di Filosofia e Psicologia.* 2012, Vol. 3 no. 2, pp. 191-207;

F. A. Tillmann, On Perceiving Persons, in Phenomenology in America. Studies in the Philosophy of Experience. Chicago: Quadrangle Books, 1967;

C. Trevarthen: "Communication and cooperation in early infancy: A description of primary intersubjectivity." In M. Bullowa (Ed.), *Before Speech*. Cambridge: Cambridge University Press, 1979, pp. 227-270;

C. Trevarthen, "First things first: Infants make good use of the sympathetic rhythm of imitation, without reason or language". In *Journal of Child Psychotherapy*. 2005, Vol. 31, pp. 91-113;

M. Tsakiris: "The multisensory basis of the self: from body to identity to others" in *Quarterly Journal of Experimental Psychology*. 2017, 70(4), pp.597-609.

F. Varela & J. Shear, "First-person Methodologies: What, Why, How?" in *Jour*nal of Consciousness Studies. 1999, Vol. 6 no.2-3, pp. 1-14;

. L. Waterhouse et. al.: "Neurofunctional mechanisms in autism" in *Psychological Review*. 1996, Vol. 103 no. 3, pp. 547-489;

S. Wieder, & S. I. Greenspan: "The DIR (Developmental, Individual- Difference, Relationship-Based) Approach to Assessment and Intervention Planning" in *Zero to Three*. 2001, Vol. 21, pp. 11-19;

L. Wittgenstein, *Remarks on the Philosophy of Psychology, Volume II*, ed. G.H. von Wright and H. Nyman, tr.C.G. Luckhart and M.A.E.Aue. Oxford: Blackwell 1980;

D. Zahavi: "Horizontal Intentionality and Transcendental Intersubjectivity" in

Tijdschrift voor Filosofie. 1997, Vol. 59, No. 2, pp. 304-321;

D. Zahavi, "Intersubjectivity" in S. Luft & S. Overgaard (eds.) *Routledge Companion to Phenomenology*, London: Routledge, 2011;

S. Zipoli Caiani: "Radical Embodied Cognitive Science" in *HUMANA*. *MENTE*. 2011, vol. 15, pp. 307-311.