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Levels of Empathy – Primary, Extended, and Reiterated Empathy

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About a century after it was first introduced, the notion of empathy has raised a widely ramified debate on how it should be defined, understood, and explained. Coined by the philosopher Robert Vischer (1872), the original German term *Einfühlung* was meant to denote a special kind of aesthetic perception. Theodor Lipps (1906) then transferred it into the field of social cognition where it was translated as "empathy" by the American psychologist Edward Titchener (1909). It is now used to designate our basic capacity to recognize and understand others as minded and expressive creatures. However, the nature of this capacity is still far from being unanimously conceived. One of the main reasons for this dissent may be seen in the Cartesian framework from which the debate took its origin. Up to now, the dominant theories of intersubjectivity have conceived of the mental as an inner realm separated from others by an epistemic gulf that can only be crossed by inference or projection. Since the mind is not visible in the body, we are, according

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to this view, in principle hidden from each other. We must infer, imitate, or simulate others' inner states in order to understand them. Hence, both the "theory theory" (TT) and the "simulation theory" (ST) of social cognition are based on a representationalist view: Concepts such as the theory of mind, simulation, or mentalization have in common that they conceive of social understanding and empathy as a projection onto others of inner modellings or representations.

1   Philosophical Premises of Empathy Theories

These Cartesian assumptions have been criticized by phenomenologists since the beginning of the last century. Max Scheler argued that in a face-to-face encounter with another person, we are confronted neither with a mere physical body nor with a hidden psyche, but with the embodied person as an expressive unity [*Ausdruckseinheit*] (Scheler, 1973, p. 256). Similarly, Maurice Merleau-Ponty wrote that "we must abandon the fundamental prejudice according to which the psyche is that which is accessible only to myself and cannot be seen from outside" (Merleau-Ponty, 1951/1964, p. 116). Ludwig Wittgenstein also rightly asked: "Do you look into *yourself* in order to recognize the fury in his face?" (Wittgenstein, 1967, § 220, p. 40). In most everyday situations, we do not use imaginative, introspective simulation routines, or inferences when we interact with another person. Instead, we immediately perceive the other's intentions and emotions in his expressive behaviour and in his meaningful actions as related to the context. Accordingly, *interaction theory* has more recently been proposed as an alternative approach to social cognition, focussing on expressive bodily behaviour, inter-bodily resonance, intentions as visible in action as well as the shared situational context in order to explain social understanding (De Jaegher & Di Paolo, 2007; Fuchs & De Jaegher, 2009; Gallagher, 2001, 2008; Zahavi, 2001, 2008).

The differences between these divergent theories may also be expressed in terms of different attitudes or *perspectives* that we take on

the persons we encounter, namely first-, second-, and third-person perspective:

(1) Following the classical *theory of mind* concept or *theory theory*, other minds can be known by referring to the best suitable hypothesis on the reasons and motives for their behaviour. Thus, we explain and predict another person's actions by relying on an innate or acquired theory of how people generally behave. This kind of inference is made on the basis of observation, meaning from a *third-person* point of view. In principle, interacting with others does not add anything to this access (Perner, 1991).
(2) In contrast, according to *simulation theory*, other minds are known through a *first-person model* that we form of their experience: Understanding others means running an inner simulation of their behaviour, thus creating an "as-if" mental state (as if we were in their place), which then has to be projected back onto the other (Gallese & Goldman, 1998; Goldman, 2006).
(3) Finally, *interaction theory* takes a *second-person* route: It is through embodied or face-to-face encounters with others that we gain our primary experience of their feelings and intentions without recourse to inner theories or simulations. In this context, the second-person perspective means the intersubjective, participant, or co-experiencing perspective, referring to situations of mutual relatedness and the intercorporeal "coupling" of the partners.

The introduction of the second-person perspective changes the whole picture, since it implies that the first- and third-person perspectives are no longer confronted with a mind-body gap in the strict sense. On the one hand, our first-person experience extends to interpersonal situations of co-experiencing affective and intentional states (such as a joint laugh) that may not be split between the partners. On the other hand, when observing another person from a 3rd person point of view, we still perceive her as an animate being, who shows her feelings through expressive behaviour (such as shame) and her intentions through actions (such as reaching for something). The problem of other minds only arises when starting out from a strictly Cartesian first-person perspective and/or from a strictly

behaviourist 3rd-person perspective. However, these are both abstractions from the 2nd-person engagement that characterizes our everyday interactions with others.

Accordingly, Gallagher and Zahavi (from a phenomenological point of view) and Trevarthen and Reddy (from a developmental point of view) have argued for the primacy of prereflective intersubjectivity and second-person interactions in social understanding (Reddy, 2008; Reddy & Morris, 2004; Trevarthen, 1979, 1993; see Fuchs, 2013). Similar claims have been advocated by enactivist approaches to intersubjectivity, emphasizing the constitutive role of interactive processes for social cognition (De Jaegher & Di Paolo, 2007; Froese & Fuchs, 2012; Fuchs & De Jaegher, 2009).

However, even if we might agree with such positions, we should still assume that all three perspectives have a particular role to play, at least in certain aspects of intersubjectivity. After all, it seems obvious that humans, at some point in their development, do become able to take another person's perspective and to explicitly transpose themselves into their point of view. This implies using one's own first-person experience as a guide for understanding others by imagining what one would probably feel like in their situation. Herein lies the (limited) justification of simulation theory. Moreover, we may sometimes apply methods of conjecturing or inferring another's mental state (belief, desire, intention) from a third-person perspective, particularly in cases where the person in question is absent or his behaviour seems ambiguous. This may also be regarded as a justification of theory theory. For these reasons, I argue that we should look for an integrative concept of empathy that is able to account both for the basic forms of embodied intersubjectivity and for more sophisticated, explicit forms of understanding others.

In this article, I will first present a non-representational concept of primary empathy, based on an *embodied and enactive* view of intersubjectivity. According to this concept, social understanding is not realized within one individual, but arises in the moment-to-moment interaction of two subjects. This process includes several components such as bodily resonance, affect attunement, the coordination of gestures, facial and vocal expression, and others. In order to support this concept, I will also examine the development of social understanding in early infancy.

Then, I will move to forms of *extended empathy*, in particular those enabled by perspective-taking and other cognitive components. Finally, I will address the phenomenon of *reiterated empathy* in which we experience the empathic reaction of others towards ourselves.

2   Primary Empathy

Primary empathy arises from direct, corporeal contact with another person, that is, from an interactive process in which both partners are immersed, or in Merleau-Ponty's term, from intercorporeality. I will take two approaches to this concept: The first is based on enactivism and dynamic systems theory, which regards social interaction as a *dynamic coupling and coordination* of two embodied agents. The second is based on the phenomenology of the lived body; here I want to focus on a process that I term *mutual incorporation*, which results in what we might call an *extended body*.

2.1   Dynamic Coupling and Coordination

From an enactive point of view, organisms do not passively receive information from their environment, which they then translate into internal representations. Rather, they actively participate in the generation of meaning; they are sense-making beings. Thus, their world is not a pregiven, external realm, represented by the brain, but a relational domain enacted and opened up by the living being's agency and sensorimotor coupling with the environment (Thompson, 2005, 2007). On this basis, social cognition is regarded as the result of a special form of action, namely *social interaction*. The enactive approach looks at the circular dynamic within a dyad of embodied agents instead of linear processes. Analyses of social interactions and conversations show that participants unconsciously coordinate their movements and utterances (Condon, 1979; Grammer, Kruck, &Magnusson, 1998; Issartel, Marin, & Cadopi, 2007; Kendon, 1990). For example, they might turn their gazes on the same object to share attention, exhibit similar postures or

facial expressions, synchronize the rhythm and speed of their speech, or unconsciously mimic the other's gestures. Their perception-action loops are coupled and interlaced with each other. Through this connection, social agents engage in *joint or participatory sense-making* (De Jaegher & Di Paolo, 2007). Hence, social understanding emerges from a dynamic, open process of moment-to-moment interactions and the coordination of two embodied subjects.

Since in normal interactions neither participant is completely able to steer the process deliberately, but is drawn into the feedback and feedforward cycles of the interaction, the process itself becomes prevailing over the two interactors. The process gains a "life of its own". The emergence of coordination demarcates the interaction as an identifiable pattern with its own internal structure. This occurs because the interactors are themselves highly plastic systems susceptible to being affected by the specific history of their coordination. "Sustained interactions can be expected to have undergone several instances of loss and regain of coordinating structures, each of them leaving the interactors slightly better able to remain in such interaction or reinitiate it" (De Jaegher & Di Paolo, 2007, p. 496). This interactional experience continually increases the skilfulness of the participants. They acquire what developmental psychologists have called *implicit relational knowing* – I will come back to this later.

2.2   Mutual Incorporation

The comprehensive system that arises through the coupling of two interactors is not a coordination of two mind or brain states, but of two embodied subjects. Through the mutual coupling of their lived bodies – mediated through eye contact, facial expressions, voice, touch, and gesture – they enter into a dyadic bodily state. In every face-to-face encounter, our bodies are affected by the other's expression, and we experience the kinetics and intensity of his emotions through our own bodily kinaesthesia and sensations. Our body schemas and bodily experiences expand and incorporate the perceived body of the other. This extension creates a dynamic interplay

that forms the basis of social understanding. I will call it "*mutual incorporation*" (Schmitz 1989, 2011, pp. 29–54; see Froese & Fuchs, 2012; Fuchs & De Jaegher, 2009).

Incorporation is a pervasive characteristic of the lived body that always transcends itself and partly merges with the environment. This is the case, for example, in every skilful handling of an instrument, as when a pianist plays the piano and lets his or her fingers find their way by themselves; or when a blind man probes his environment with a stick and feels the surface at the top of it. In such cases, the instrument is integrated into the body's motor schema like an extension of the body, subjectively felt as "melting" or becoming one with the instrument. However, this kind of incorporation also occurs with other people, even at a distance. An example of this is the experience of fascination. Thus, we may listen to a spellbinder, literally hanging on his lips (as the German expression goes) – and feel drawn towards him. Or, we may watch the *salto mortale* of an aerial acrobat with a mixture of fascination and anxiety. Our lived body extends and connects with the acrobat's swinging movements; we may even feel prompted to co-movements. Now, *mutual incorporation* implies a reciprocal interaction of two agents in which each body schema extends and embodies the other. This may be illustrated by the following diagram (Fig. 2.1) (cf. Froese & Fuchs, 2012):
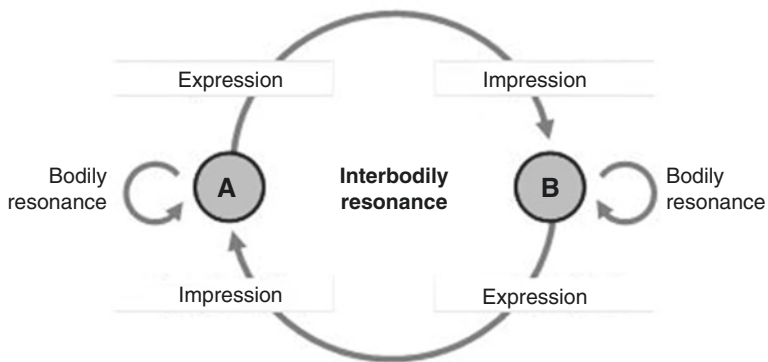

Fig. 2.1 Mutual incorporation

Let us assume that A is a person whose emotion, for example, anger, manifests itself in typical bodily (facial, gestural, interoceptive, adrenergic, circulatory, etc.) changes. His lived body thus functions as a felt "resonance board" for the emotion: A feels the anger *as* the tension in his face, *as* the sharpness of his voice, the arousal in his body, etc. These proprio- and interoceptive bodily feelings may be termed *bodily resonance.* This resonance is an *expression* of coinciding emotions, that means, the anger becomes visible and is perceived as such by A's partner B simultaneously. But what is more, the expression will also produce an *impression*, namely by triggering corresponding or complementary bodily feelings in B. Thus, A's sinister gaze, the sharpness of his voice or expansive bodily movements might induce in B an unpleasant tension or even a jerk, a tendency to withdraw, and so on (similarly, witnessing shame might induce an embarrassed aversion, sadness, a tendency to connect and console, and so forth). Thus, B not only sees the emotion in A's face, gaze, and gesture, but also senses it within his own body, through his own bodily resonance.

However, the mutual resonance procedure does not stay like this, for the impression and bodily reaction caused in B becomes in turn an expression for A. It will immediately affect the latter's bodily reaction, change his expression, however, slightly, and so forth. This creates a circular interplay of expressions and reactions that occurs in split seconds, constantly modifying each partner's bodily state. The process becomes highly autonomous and is not directly controlled by either of the partners. They have become parts of a dynamic sensorimotor and interaffective system that connects their bodies by reciprocal movements and reactions. Each lived body reaches out, as it were, to be complemented by the other; both are coupled to form an extended body through *interbodily resonance or intercorporeality* (Merleau-Ponty, 1960).

No mental representation is necessary for this process. There is no strict separation between the inner and the outer, as if a hidden mental state in A produced certain external signs which B would have to decipher. For A's anger may not be separated from its bodily expression; and similarly, B does not perceive A's body as a mere object, but as a living, animate and expressive body that he is coupled with. One feels the other in one's own body, albeit in a

manner of feeling that mostly remains implicit and is not thematized as such. Nor is a simulation required for the process of mutual incorporation. We certainly do not simulate the other person's angry gaze or voice, even less his anger, but rather feel tense, threatened, or even invaded by his expressive bodily behaviour. Bodily sensations, tensions, action tendencies, and so on that arise in the interaction do not serve as a separate simulation of the other person but they feed into mutual perception.

In Michael Polanyi's terms, one could also say that the felt bodily resonance is the *proximal*, while the other's perceived body is the *distal* component of empathic perception, with the proximal component receding from awareness in favour of the distal, or becoming *transparent* for it (Polanyi, 1967). This may be compared to the sense of touch, which is simultaneously a self-feeling of the body (proximal) *and* a feeling of the touched surface (distal); or it may be compared to the subliminal experience of thirst (proximal) that first becomes conspicuous as the perceptual salience of water flowing nearby (distal). The same goes for both partners in an interaction, their bodily resonance does not simulate the other, but *mediates* the perception of the other.

Susan Stuart (2012) has coined a suitable term, *enkinesthesia*, meaning "feeling one's own movements into the other", or empathy through co-movement. In this sense, we can refer to the experience of the other in terms of "embodied" perception, which, through the interaction process, is also "embodied" communication. In Merleau-Ponty's account: "The communication or comprehension of gestures comes about through the reciprocity of my intentions and the gestures of others, of my gestures and the intentions discernible in the conduct of other people. It is as if the other person's intentions inhabited my body and mine his". (Merleau-Ponty, 1945/1962, p. 185)

As we can see, the concept of mutual incorporation leads to the opposite of the representationalist account: Primary empathy is not an inner modelling in a detached observer. Here the other's body extends onto my own, and my own extends onto the other. As regards the affective side of experience, this amounts to *interaffectivity,* which means a continuous interaction and mutual modification of both

partners' emotions. This is the phenomenological equivalent to the dynamic coupling of embodied agents as described on the system level.

2.3   The Early Mother-Infant Dialogue as a Mutual Incorporation

The intercorporeal concept is confirmed when we take a look at the development of social perception in early childhood. Soon after birth, the infant is capable to connect with the body of others and to imitate their facial expressions (Meltzoff & Moore, 1977, 1989). Through the mimetic capacity of their bodies, infants are able to transpose the other people's gestures and expressions that they see onto their own proprioception and movement. Perception, proprioception, and action are integrated within a common sensorimotor space. The infant does not need to carry out any process of inner simulation. Its body schema is characterized by a transmodal openness that immediately allows it to incorporate and imitate others. Hence, what primary intersubjectivity starts with is not mindreading, but embodied interaction or intercorporeality. Since bodily imitation evokes corresponding feelings as well, mutual affective resonance gradually develops within the dyad. Six- to eight-week-olds already engage in proto-conversation with their mothers by smiling and vocalizing (Trevarthen, 1979, 1993). Both caregiver and infant exhibit a finely tuned coordination of movements, rhythmic synchrony, and mirroring of expressions, which has often been compared to a couple dancing. They also follow a turn-taking pattern, shifting the roles of agent and recipient in a non-random sequence.

Daniel Stern has emphasized the temporal flow patterns and vitality affects that are shared by both partners (Stern, 1998). Infants perceive affects as the intermodal extract, rhythms and dynamics of melodic, vocal, facial, and gestural utterances. These intermodal characters and contours provide some of the main bridges needed for mutual incorporation and with it primary understanding. Affect attunement and mutual incorporation create *dyadic affective states* (Tronick, 1998), often an intense pleasure or joy. The emerging affect during a joyful play situation between mother and infant may not be divided and

distributed among them. It arises from the "between", or from the shared situation in which both are immersed. Thus, affects are not enclosed in an inner mental sphere to be deciphered from the outside, but come into existence, change, and circulate between self and other in intercorporeal dialogue.

Due to the neuroplasticity of the human brain, an infant's history of interactions continuously influences its disposition and skills. The patterns of interaction, even the earliest experiences of being held, comforted and addressed by their caregivers, are imprinted in their implicit memories and result in what Lyons-Ruth et al. (1998) have called *implicit relational knowing*. This prereflective knowledge or skill of how to engage with others includes knowing how to share pleasure, elicit attention, avoid rejection, and re-establish contact. In order to maintain specific types of interactions, infants acquire special interactive schemes ("*schemes of being-with*", Stern, 1998) and corporeal micropractices (Downing 2004) that they need for keeping up the respective interaction. Implicit relational knowledge is a temporally organized, "musical" memory for the rhythm and dynamics that are subliminally present in interactions with others. It implies an intuitive grasp on interactive vitality contours ("crescendo" or "decrescendo", "ritardando" or "accelerando", flowing or explosive dynamics, etc.) together with the emotions that they express. It may also be regarded as *interbodily memory* that shapes the actual relationship as a procedural field, encompassing and connecting both partners. Hence, the earliest experiences become lasting dispositions that manifest themselves tacitly in a child's later actions and habitus, that is, their entire set of learned dispositions.

3   Extended Empathy

This concept of embodied intersubjectivity underlying primary empathy as outlined so far does not exhaust the possibilities of empathic understanding. On the basis of primary empathy, we may also conjecture about the situation of the other and envision how the world might seem from his perspective, for example: *What could have made him so angry, shocked, or upset? Why was he particularly sensitive in the given situation?*

This happens in particular when an irritation, misunderstanding, or other kind of disturbance occurs, and we try to grasp why the other said or did what he did, what he might be thinking or feeling, etc. Through additional information and inference, we can enhance our understanding and in this way often deepen our empathy. But the possibility of putting oneself in another person's shoes goes further than merely conjecturing about why *he* feels the way he does: in fact, I can imagine then how *I* would feel and react if I were in the same situation. At this point, we are certainly employing some form of simulation, which I prefer to call *perspective-taking* or *imaginative transposition*.

This mode of empathy is without doubt quite different from the first one discussed. To begin with, it entails an *explicit, cognitive operation*, namely, the purposeful envisioning of the situation of the other, which often employs information about the person that one could not infer directly from the situation at hand. But moreover, it involves an *imaginative operation*, that means, a transposition into an "as-if" scenario (i.e., as if I were the other) which transcends the bodily level. Instead of the involuntary coupling of mutual incorporation, we deliberately take the other's stance. Thus, it seems necessary to differentiate between a primary, implicit, or bodily empathy and an extended, explicit, or imaginative empathy.

Imagining others' views presupposes a reflective stance or a *meta-perspective* on myself and the other from which I can perform the operation of self-transposition (Fuchs, 2013). This allows me to gain a new perspective on the world, the perspective of the other. The imaginative transposition may imply a spatial "as-if", as when I imagine how a certain object might look from someone else's position: my "here" becomes his "there", and his "there" becomes my "here". One test for this shifting capacity is known as the "turtle task" in which a picture of a turtle is placed between an adult and the child. The child then has to tell how it sees the turtle ("right side up") and how the adult sees it ("upside down"). Whereas younger children give egocentric replies, claiming that the adult sees the turtle as they do, children at the age of four and a half are able to switch to an allocentric perspective and acknowledge the adult's differing view (Masangkay et al., 1974; see also Flavel, 1992, for an overview).

More frequently, however, perspective-taking is applied in order to imagine more complex psychological situations experienced by others. The process often involves taking into account differing views and interpretations of the same situation. The capacity to understand these conflicting views that arise from presuppositions based on disparate experience and knowledge can be tested using "false-belief tasks" such as the "Sally-Anne test".[1] Usually, children become able to correctly solve such tasks when they are four to five years old. With this ability, they extend their capacity to understand another's particular (and often limited) point of view and, thereby, augment their empathy.

It is obvious that theory theory and the simulation theory of social cognition are based on the additional cognitive faculties that a child gradually acquires over the course of social interactions from age two on, in particular through situations of joint attention, cooperative practice, and mutual awareness of the other's intentions (Fuchs, 2013). However, it also becomes clear that these theories erroneously take these indirect cognitive operations to pertain to all kinds of empathic understanding. Both deny that it is possible to experience other minds; both presuppose that minds are fundamentally opaque or invisible. Thus, they fail to acknowledge the level of primary empathy and its implicit and immediate understanding of the other's expressive behaviour as meaningfully related to the context of a situation.

Moreover, simulation theory mistakes bodily resonance (crucial for primary empathy) for a simulation in the "as-if" sense. However, even if I unconsciously mimic another's smile, there is no "as-if" involved, for I do not pretend that my own felt smile is the other's smile or project it onto the other. Indeed, at this level of sensation one cannot speak of an "as-if" modality at all because bodily sensations and movement

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[1] False belief tests are typically performed in the following way. After introducing two dolls, Sally and Ann, the experimenter presents a short skit: Sally takes a marble and hides it in her basket. She then leaves the room and goes for a walk. While she is away, Anne takes the marble out of Sally's basket and puts it in her own one. Sally is then reintroduced and the child is asked the key question: "Where will Sally look for her marble?" Children before the age of four will typically point to Ann's basket, because they (wrongly) assume Sally to have the same knowledge as they have themselves (Baron-Cohen, Leslie, & Frith, 1986; Perner, Stummer, Sprung, & Doherty, 2002).

tendencies that are evoked when encountering another person are only implicitly present in one's perception of his expressions and emotions.[2] As already mentioned, the proximal or bodily component (to come back to Polanyi's terms) is *transparent* for the distal or perceived component, namely the emotion of the other; it functions as the preconscious *medium* of interaffectivity and empathic understanding. In contrast, simulation and inference are operations that can only be performed on an explicit level. Simulation theory also incorrectly generalizes the possibility of imaginative transposition or simulation to include all kinds of empathy (as in Goldman, 2006). Granted, one can think of typical examples of simulation: When I hear, for example, that someone has missed his plane, I can imagine myself in the same situation as if I had just gone through the same ordeal and, as a result, feel his disappointment or anger. Yet, this form of imagination only appears on higher, and most likely verbally structured, levels of social cognition; on the basic level of empathy, however, it is not necessary for the direct understanding of another person's anger.

One could ask whether cognitive forms of empathy or perspective-taking may develop or exist independently from embodied empathy. Indeed high-functioning autistic individuals are able to compensate for the lacking capacity of primary intersubjectivity by developing strategies of explicit mentalization and learning to infer from social cues (Fuchs, 2015). Temple Grandin, a woman with autism spectrum disorder, described her problems with interpersonal relations as follows to Oliver Sacks:

> She is now aware of the existence of these social signals. She can infer them, she says, but she herself cannot perceive them, cannot participate in this magical communication directly, or conceive the many-leveled kaleidoscopic states of mind behind it. Knowing this intellectually, she does

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[2] This is also the case when bodily resonance includes imitative components, for example, movement impulses that mirror gestures and actions of others – possibly as mediated by the brain's system of mirror neurons. However, these imitative tendencies, too, remain typically unaware, which inhibits the complex process of simulation and reflective projection from taking place at all. For a critique of the trend to shift simulation to *subpersonal*, or more specifically, to neuronal processes, see Gallagher (2007).

her best to compensate, bringing immense intellectual effort and computational power to bear on matters that others understand with unthinking ease. This is why she often feels excluded, an alien. (Sacks, 1995, p. 272)

This may be rightly called a "theory of mind", a rule- and knowledge-based system of inferring other people's state of mind. It also becomes obvious, however, that such compensatory strategies fail to establish an intuitive understanding of others, normally provided by intercorporeality. There are other kinds of disorders in which the cognitive components of empathy are well developed, but with the primary goal of manipulating, deceiving, and exploiting others. This is the case particularly in the "dark triad" of narcissistic, Machiavellian, and sociopathic individuals (McHoskey, Worzel, & Szyarto, 1998; Paulhus & Williams, 2002), who can be very talented in perspective-taking, while having no sympathy whatsoever for fellow human beings, especially their victims. One could add that even a torturer needs certain components of cognitive empathy, if only to better calibrate his cruelty. This shows that empathy in its full sense means an integration of primary and extended, or of intuitive and more explicit, modes of empathy.

4   Reiterated Empathy

The third and final step of empathy I want to look at involves not just imagining myself in your place but an additional move: I can also empathically perceive you as an other who experiences me as an other to you. In other words, the imaginary transposition in this kind of empathy implies the possibility of seeing myself from your perspective, as you empathically perceive me. This is what Edith Stein (1989) has called "reiterated empathy" [*iterierte Einfühlung*]. At first sight, it corresponds to self-consciousness as seeing oneself with another's eyes or assuming a different perspective on oneself. However, what Stein is referring to demands not only a cognitive operation, but also an empathic self-other relationship, experienced from a second-person, embodied perspective. It is based on primary intercorporeality, and at the same time transforms it onto a higher level. I am experiencing my

body in the first person, but it also appears to you in the second-person mode, and in empathically grasping that experience of you, I experience myself as other to you. Thus, through reiterated empathy, the experience of oneself as an other for the other, we gain a non-egocentric and intersubjective view of our own lived body in the public world.

A paradigmatic experience of this kind of reiterated empathy is *shame*. In feeling ashamed, I experience myself as being looked at and devaluated by others; I feel their gazes literally burning my face. In Sartre's account, I become an object-body for others. Let us take the example of an indecent utterance in the presence of others that creates a moment of painful embarrassment. After I commit the faux pas, I feel the others' abashment over my behaviour, which in turn induces or increases my own feeling of shame. Another, rather contrary experience of reiterated empathy is the mutual gaze of affection and love: When I perceive the other's loving gaze, I experience myself as being recognized and esteemed by him or her.

In the end, this may be regarded as the synthesis of primary and secondary empathy: Reiterated empathy integrates intuitive components (being affected by the other's expression, interbodily resonance) and cognitive components (taking the other's perspective). On this third level, empathy combines intercorporeality, interaffectivity and intersubjectivity – being aware of the other *as* other – thereby enabling a truly interpersonal relation, which Buber (1970) called the I-thou relationship.

5   Conclusion

I have outlined a non-representational concept of social understanding and empathy based on embodied interaction in face-to-face encounters. According to this concept, intercorporeality and interaffectivity form the basis of empathy. It emerges from the interactive practices and participatory sense-making of the individuals involved. I have described these processes, first, from an enactive point of view in which empathy figures as a dynamic coordination of embodied agents, then, from a phenomenological point of view as a mutual

incorporation or a reciprocal extension of the lived bodies and body schemes of the participants. Empathy in this sense can easily be experienced in intensive encounters with others; but in a subtler way, it plays a role in every social interaction. Mutual incorporation is not just a subjective illusion based on a virtual body model projected onto the other. On the contrary, it corresponds exactly to the coupling and coordination of embodied agents that can be observed on the system level.

In early mother-infant interactions, mutual incorporation begins during the first months in the form of imitation, affect attunement and dyadic states of awareness. Infants do not need to form internal models or representations of others in order to communicate. Social understanding develops as a practical, intercorporeal sense, a musicality for the rhythms, and patterns of early dialogue. In a non-mentalizing way, children become able to see the intentions and emotions in the actions of others, in their postures, gestures, and facial expressions, as related to the context of the situation at hand. This provides primary understanding without recourse to a concept of mental states. Moreover, developmental accounts point out that empathy is also based on inter-corporeal memory (Fuchs, 2012) or an implicit relational knowledge of how to interact with others that is acquired in early childhood and conveys a basic sense of social attunement.

In this view, how we understand others and empathize with them is not the result of mental inference or simulation, as mainstream cognitive science would have it. Social understanding is grounded in a prereflective interbodily reciprocity that creates a "mixture of myself and the other" (Merleau-Ponty, 1951/1964, p. 155). On the other hand, mutual incorporation is not the only way of social understanding. Primary embodied empathy may be augmented by cognitive means such as inference on the basis of additional information and explicit imaginary transposition into the other's situation. Combining these additional components with primary empathy will usually enhance our potential to understand others. However, these higher-level cognitive capacities are neither necessary nor sufficient as such to constitute empathy as an interaffective relation to the other. Despite those later developments, embodied intersubjectivity remains the basis for our everyday social understanding.

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