Interpersonality and Social Cognition. Introductory

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Interpersonality and Social Cognition

Introductory

Defining margins of the mental has become one of the much-discussed themes in the philosophy of mind and cognitive science. In a straightforward form it may read: What are the boundaries of the mind or, in other words, where does the mind end and the world begin? Is the mind in the head (or in the brain) or is it extended into the surrounding world? Is the right approach to adhere to the "view from within" (Varela and Shear, 1999) or should it be studied in the context of human coping in the world: natural, social and cultural (a perspective that might eventually be called the "view from without")? By claiming that the mind is not (only) in the head, the question that arises is how to appropriately set its scope: Is the mind "extended" so as to entail bodily periphery (Aranyosi, 2013)? Does the enactive body in general shape the mind (Gallagher, 2005), or does the mind expand beyond the outskirts of the body and entail material objects (Malafouris, 2013)? How does human use of tools and artifacts fulfill conditions in order for the mind to function in a truly "extended" mode (Clark & Chalmers, 1998)?

However, one aspect of "extendedness" that has recently gained particular scientific and philosophical attention is our capacity to exceed the margins of individuality and mentally unfold in social sharing. The idea that humans are social animals has been around since the time of Aristotle, but nowadays we know that sociality is a profound trait of human mentality that strongly shapes the sense of "we-ness" that, in turn, proves crucial for individuals attempting to make sense of reality. Recently, sufficient scientific evidence has been gathered to support this claim. For instance, the phenomenon of *social cognition* has become an intensively investigated research field (e.g., Kunda, 2001; Bless et al., 2004). A more recent version is the *embodied and enactive approach to social cognition*, which represents a further shift away from treating the mind in an individualist, and isolationist, manner. This approach offers some innovative ideas and refreshes the discussion with novel insights. It, roughly, blames mainstream social cognition for attributing mentalism to behavior, which is basically non-mentalistic (e.g., De Jaegher and Di Paolo, 2007).

Closely related to the topic of social cognition is *interpersonality* or *intersubjectivity* (which, in the view of the editor, form a unitary field because none of them can be explained without recourse to the other), which receives major philosophical input from Edmund Husserl (*Husserliana*, Vol. 13–15, 1963). The theme echoes in contemporary discussions in various domains of research and schools of thought. As Iacoboni explains,

"Intersubjectivity, the sharing of meaning between people, has always been perceived as a problem in classical cognitivism. Simply put […]: If I have access only to my own mind which is a private entity that only I can access directly, how can I possibly understand the minds of other

people? How can I possibly share the world with others, and how can they possibly share their own mental states with me?" (Iacoboni, 2008, 262–263)

A version with growing influence is one that could be labeled *embodied and enactive approach* to interpersonality. One of the prominent ideas within this orientation is that of *participatory sense-making* (De Jaegher and E. Di Paolo, 2007); another stresses the nonrepresentational character of embodied social interacting (Fuchs and de Jaegher, 2009).

Relating in a socially conditioned world is a phenomenon known to both human and non-human primates that develops very early in life. What we learn from developmental studies is that we are exposed to sociality at the earliest stages. Within the first three months after birth, infants respond to voices, vocalize, grasp, point, gesture, look, although it is likely these kind of skills first develop prenatally (for instance, registering the mother's voice *in utero*; e.g. Decasper and Fifer, 1980). Earlier than is assumed, infants successfully discriminate between living beings and material objects (Legerstee, 1991), pay selective attention to human faces (Fantz, 1963) (e.g. face-to-face communication), and engage in protoconversations (gestural and vocal communication on a pre-language level). Although infants can spontaneously point within the first three months, it is not before nine months that it becomes an act of deliberative intent. That is why Tomasello speaks of the "nine-month revolution." As he explains, "At nine months of age human infants begin engaging in a number of so-called joint attentional behaviors that seem to indicate an emerging understanding of other persons as intentional agents like the self whose relations to outside entities may be followed into, directed, or shared." (1999, 61) Attributing full intentionality to infants of that age, that is, claiming that infants understand others as intentional agents, as Tomasello does, is probably not undisputable, but what seems clear is that this kind of "mind reading" has no parallel in other primates. It is also the time when *primary intersubjectivity* (shared attention between infant and care giver) is complemented with *secondary intersubjectivity* (mutual attending to object) (Trevarthen, 1978; Gallagher and Hutto, 2008).

"Expressions, intonations, gestures, and movements, along with the bodies that manifest them, do not float freely in the air; we find them in the world, tied to specific contexts, and infants soon start to notice, how others engage with the world, thus *primary intersubjectivity* is supplemented and enhanced by process of *secondary intersubjectivity* (Trevarthen and Hubley, 1978), starting in the first year of life with the advent of joint attention. Infants begin to tie actions to pragmatic and social contexts; they enter into contexts of shared attention–shared situations–in which they learn what things mean and what they are for. In joint attention and joint actions the child looks to the body and expressive movement of the other to discern the intention of the person or to find the meaning of some object." (Gallagher, 2013, 260)

This all makes us aware that we are not (and are never) alone. We are literally born into a world of others. Their presence is felt before it is understood. Others are there, from the moment after birth onward, with their touch, warmth, voices, smiles, songs, comforting care, but also with warnings and guiding interventions, before we are even aware of their presence. Indeed, we should be aware of the fact that *there is mental life before awareness*, and it can be very intense and even meaningful. We cannot escape otherness, which is present before the individual "self" is cognitively established. Thus, we first learn that we exist in a world of others and then eventually derive and delineate selfhood from the experience of collectivity. In other words, interpersonality has left its stamp before the "self" has distanced itself as individuum (Trevarthen, 1993). Accordingly, cognition is not reducible to singular internal processing, nor is thought property of an isolated mental instance.

For Donald Davidson (2001), intersubjectivity is a precondition of "objectivity of thought." According to what has become known as "triangulation" (e.g., Eilan, 2005), there must be at least two subjects and an object in the world to which they jointly attend, comprising mutual awareness and communication. Following Davidson, Naomi Eilan concludes that *thought is essentially social*.

Contrary to the problem of other minds whose dominant (skeptical) implication is that of *absence*, we should think of various modes of *presence* of others as primary. Because we are "always already" social, the feeling of *alleinsein* ("being alone") can then only be derived from interpersonality, which comes prior and is more fundamental. For experts dealing with this subject, this might mean they should revert from studying the mind in its solipsist version, if considering it in isolationist terms, and choose a scientifically more rewarding approach, namely that of studying the mind in social interaction. It might also indicate that knowing *other* minds need not be, after all, an impossible theoretical mission.

Seen from the neuroscientific perspective, human brains are wired to enable connection and communication, as well as more complex social behavior (e.g., Liberman, 2013; Dunbar, 1998). During the last 20 years, a whole branch of investigation has been developed based on the discovery of "mirror neurons" which has shed new light on possible (re)interpretation of how we understand one another, in the sense of learning about others' motives and goals by mimicking them in an "as if" manner, without recourse to conscious "computation" (e.g., Rizolatti and Sinigaglia, 2008; Iacoboni, 2008; Jacob, 2008). Somewhat similar are studies focusing on *imitation* (Legerstee, 1991; Meltzoff and Prinz, 2002; Overt and Carpenter, 2012). Still, others see interpersonality in terms of *reciprocity* (Bowles & Gintis, 2011).

There is an aspect of interpersonality that goes beyond the mere feeling we are one among many, and every "I" is part of the multitude. The thing is, we not only co-exist, but also co-feel or *empathize* (Lipps, 1903; Husserl, 1963; Stein, 2017; Gallese, 2001, 2003). Furthermore, we not only communicate, we also *cooperate* – an example of *altruism* (Trevarthen, 1979; Tomasello, 2009). Curiously enough, motives for collaborative undertakings are not only for the accomplishment of a common goal that proves beneficial; it is the very pleasure of doing things together that is satisfying for co-agents. As explorations of children's behavior show, "collaborative activity is thus for them an end in itself rather than a means to achieve some individual goal" (Pacherie, 2011, 378).

Today, the most intensively studied and researched phenomenon in this domain is *joint attention*. (One of the first accounts is Scaife and Bruner, 1975; a collection with historical overview on joint attention is provided by Moore and Dunham, 1995; more recent comprehensive collections on joint attention are Eilan et al., 2005 and Seemann, 2011.) The importance of what Jean-Paul Sartre (1956) has called a sense of "self-for-others," what Mead (1913) referred to as "the social self," and Jerome Bruner (1995) labeled "meeting of minds," has been recognized and systematically analyzed by developmental studies. What it could certify is that

"[u]p until the age of 4 or 5 months, infants look mainly at their caregivers. Attentional focus switches to physical objects at about 5 months. Between the age of 6 and 9 months we find the beginning of gaze alternations between objects and adults, where this includes first bouts of gaze-following, restricted by the visibility of the object of the infant. Pointing and more sophi-

sticated forms of gaze- and point-following, coupled with the phenomenon of social referencing […] begin to take form between the age of 10 and 12 months" (Eilan, 2005, 4).

For Bruner himself "joint attention involves knowing that another is looking at and experiencing something in the visual world" (Bruner, 1995, 7). *Gaze-following* has since become probably the most researched aspect of joint attention. As Shaun Gallagher further clarifies:

"Joint attention is located at the intersection of a complex set of capacities that serve our cognitive, emotional, and action-oriented relations with others. In one regard it involves *social cognition*, our ability to understand others, what they intend, and what their actions mean. Here there is a two-way relationship between joint attention and social cognition. One the one hand, certain social cognitive abilities allow us to enter into joint-attentional situations with others; on the other hand, our engagements in joint-attentional situations with others allow us to better understand their intentions and their actions" (2011, 293).

Another related and, nowadays, broadly discussed theme is that of *joint action*. Briefly explained: "In joint action, agents make their own contribution to the joint goal but must also coordinate with others (dyadic adjustments) and coordinate with others too with respect to the joint goal (triadic adjustments)" (Pacherie, 2011, 375). Coordination may lead to cooperation: "At the end of the spectrum of collective actions are joint cooperative actions, where agents share the same goal, intent to act together, and coordinate their actions to achieve their shared goal" (ibid., 350).

Christopher Peacocke (2005, 300) (following David Lewis, 1969, and Stephen Schiffer, 1988) provides a general schema of mutual or common knowledge, applicable also to joint attention and action, in the following form:

x knows that p;
y knows that p;
x knows that y knows that p;
y knows that x knows that p;
x knows that y knows that x knows that p;
y knows that x knows that y knows that p;
etc.

In providing an overview of relevant elements of the philosophy of sociality, one should not forget John Searle's notion of *social ontology* (Searle, 1995, 2010) and his idea of *collective intentionality* (Searle, 1983), for this discussion provides yet a more generalized framework of sense-making that may prove important when understanding other people's minds, motives, and goals of their joint actions, shared experience, and knowledge.

The ever-growing amount of literature on these issues seems to conclude with the overall conviction about the ubiquitous dimension of interpersonal exchange and social sharing, and it may motivate us to join Peter R. Hobson (2007) in concluding: "We share, therefore we think."

Authors contributing to the present thematic block concentrate on selected aspects of this truly broad and diverse subject. *Marek McGann's* paper, "Situated Agency: The Normative Medium of Human Action," examines some of the implications of the concept of agency that spills over from the individual into the environment. In particular, it looks at how the agency of groups of people (cultures, societies, and subcultures) use physical environments over time to perform group action, endowing those physical environments with a form of

agency. The view presented in the paper challenges any passive assumption about the environment we might have. It forces us to see the environment not as a dull, inanimate object against which human behavior must push, but as a living, dynamic entity that is the medium through which people's actions are coordinated over spatial and temporal scales that defy individual human activity.

In his article, "Joint Attention and Understanding Others," *Michael Schmitz* argues against the traditional, strongly individualistic, and theory-based forms of understanding other minds as well as against the propositional accounts of the structure of joint attention. He then introduces approach, which puts emphases on joint attention as a pragmatic and affectively charged intentional relation (PAIR). This means that the understanding of others takes place on a non-conceptual level prior to the differentiation of mind and body, which only occurs on the conceptual level.

In "Inference or Familiarity? The Embodied Roots of Social Cognition," *Massimiliano L. Cappuccio* criticizes those intellectualistic theories of social cognition that base understanding on mind-reading and meta-theoretical representations. He outlines own concept of the "embodied familiarity hypothesis," which claims that we can make sense of the intention underlying another's movements on the basis of our direct acquaintance with them. It requires involvement of one's embodied dispositions (i.e., direct sensorimotor experience), which allows a co-agent to understand the observed action's goal, without engaging calculative skills and without recourse to detached capabilities of reasoning.

James Jardine's contribution, "Husserl and Stein on the Phenomenology of Empathy: Perception and Explication," offers some general explanations of the phenomenon of empathy, contrasts Husserl's and Stein's understanding of this phenomenon, and outlines an interpretation of empathy as an intuitive experience of other minds.

"'Context of Commonality' or Why Sharing Is More than Attending," by *Zdravko Radman*, is centered around the idea that interpersonality takes various forms and that many of the authentically human modes of sharing are culturally conditioned. Whereas, for instance, gaze-following happens spontaneously for more complex modes of sociality, the "context of commonality" is necessary for interacting to be considered proper sharing, which presupposes mutual understanding in regard to the object of joint attending or acting.

In his paper, "A New Way of Thinking – About Anything – and How to Write from It," *Eugene T. Gendlin* does not so much directly address the problem of interpersonality as he posits the issue of understanding to be more fundamental. He does so by developing the Process Model – his own methodology for moving beyond the obsolete notion of language as a one-to-one relationship with the pre-existing given, which mistakenly assumes that what is "real" is already patterned in available conceptual formulations. Instead, as he claims, thoughts and concepts emerge from live interaction. According to this view, the living interaction always comes first, and conceptual structures then prove to be derivative. By reversing the standard order, he offers a novel insight that goes beyond old logical determinacy and requires from the reader to engage in bodily felt experience as a means of implicit change of conceptual content brought about by the interpretative interaction itself.

References

Aranyosi, I. (2013) *The Peripheral Mind*: *Philosophy of Mind and the Peripheral Nervous System*, Oxford: Oxford University Press.

Bless, H., K. Fielder, and F. Strack (2004) *Social Cognition: How Individuals Construct Social Reality*, New York: Taylor & Frances.

Bowles, S. and H. Gintis (2011) *A Cooperative Species: Human Reciprocity and Its Evolution*, Princeton, NJ: Princeton University Press.

Bruner, J. (1995) "From Joint Attention to the Meeting of Minds", in Moore, C. and P. Dunham (eds.), *Joint Attention: Its Origins and Role in Development*, Hillsdale, NJ: Erlbaum.

Bullowa, M. (ed.) (1979) *Before Speech: The Beginning of Interpersonal Communication*, Cambridge: Cambridge University Press.

Clark, A. and D. Chalmers (1998) "The Extended Mind", *Analysis*, 58/1, 7–19.

Davidson, D. (2001) "The Emergence of Thought", in *Subjective, Intersubjective, Objective*, Oxford: Blackwell.

Decasper, A. J. and W. P. Fifer (1980) "On Human Bonding: Newborns Prefer Their Mothers' Voices", *Science*, 208, 1174–1176.

De Jaegher, H. and E. di Paolo (2007) "Participatory Sense-Making", *Phenomenology and the Cognitive Sciences*, 6/4, 485–507.

Dunbar, R. (1998) "The Social Brain Hypothesis", *Evolutionary Anthropology*, 6/5, 178–190.

Eilan, N., (2005) "Joint Attention, Communication, and Mind", in Eilan, N. et al. (eds.) *Joint Attention: Communication and Other Minds*, Oxford, Oxford University Press.

Eilan, N., C. Hoerl, T. McCormac, and J. Roessler (eds.) (2005) *Joint Attention: Communication and Other Minds*, Oxford: Oxford University Press.

Fantz, R. L. (1963) "Pattern Vision in Newborn Infants", *Science*, 140, 296–297.

Fuchs, T. and H. de Jaegher (2009) "Enactive Intersubjectivity: Participatory Sense-Making and Mutual Incorporation", *Phenomenology and the Cognitive Sciences*, 8/4, 465–486.

Gallagher, S. (2011) "Interactive Coordination in Joint Attention", in Seemann, A. (ed.) *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*, Cambridge, MA: MIT Press.

Gallagher, S. (2013) "Intersubjectivity and Psychopathology", in Fulford, K. W. M. et al. (eds.) *The Oxford Handbook of Philosophy and Psychiatry*, Oxford: Oxford University Press.

Gallagher, S. and D. Hutto (2008) "Understanding Others through Primary Interaction and Narrative Practice", in Zlatev, J., T. P. Racine, C. Sinha, and E. Itkonen (eds.) *The Shared Mind: Perspectives on Intersubjectivity*, Amsterdam – Philadelphia: John Benjamins.

Gallese, V. (2001) "The 'Shared Manifold' Hypothesis: From Mirror Neurons to Empathy", *Journal of Consciousness Studies*, 8, 33–50.

Gallese, V. (2003) "The Roots of Empathy: The Shared Manifold Hypothesis and the Neural Basis of Intersubjectivity", *Psychopathology*, 36, 171–180.

Gallup, G. G., J. R. Anderson and S. M. Platek (2011) "Self-Recognition," in Gallagher, S. (ed.) *The Oxford Handbook of the Self*, Oxford: Oxford University Press, 80–110.

Hermans, H. J. M. (2011) "The Dialogical Self: A Process of Positioning in Space and Time," in Gallagher, S. (ed.) *The Oxford Handbook of the Self*, Oxford: Oxford University Press, 654–680.

Hobson, P. (2007) "We Share, Therefore We Think", in Hutto, D. and M. Ratcliffe (eds.) *Folk Psychology Re-Assessed*, Dordrecht: Springer.

Husserl, E. (1963) *Cartesianische Meditationen und Pariser Vorträge*, *Gesammelte Werke*, Vol. 1, The Hague: Martinus Nijhoff.

Iacoboni, M. (2008) *Mirroring People: The New Science of How We Connect with Others*, New York: Farrar, Strauss and Giroux.

Jacob, P. (2008) "What Do Mirror Neurons Contribute to Human Social Cognition?", *Mind & Language*, 23, 190–223.

Klein, G. (1976) "Introspection, Empathy and Psychoanalysis", *Journal of the American Psychoanalytic Association*, 7, 459–483.

Kohut, H. (1978) "The Psychoanalyst in the Community of Scholars", in Ornstein, P. (ed.) *The Search for the Self: Selected Writings of Heinz Kohut*, Vol. 2, New York: International Universities Press.

Kunda, Z. (2001) *Social Cognition: Making Sense of People*, Cambridge, MA: MIT Press.

Legerstee, M. (1991) "The Role of Person and Object in Eliciting Early Imitation", *Journal of Experimental Child Psychology*, 51, 423–433.

Lewis, D. (1969) *Convention: A Philosophical Study*, Cambridge, MA: Harvard University Press.

Liberman, M. D. (2013) *Social: Why Our Brains Are Wired to Connect*, Oxford: Oxford University Press.

Lipps, T. (1903) "Einfühlung, inere Nachahmung und Organempfindung", *Archiv für gesamte Psychologie*, 1, 465–519.

Malafouris, L. (2013) *How Things Shape the Mind: A Theory of Material Engagement*, Cambridge, MA: MIT Press.

Mead, G. H. (1913) "The Social Self", *J. Philos. Psychol. Sci. Methods*, 10, 374–380.

Meltzoff, A. N. and W. Prinz (eds.) (2002) *The Imitative Mind: Development, Evolution, and Brain Bases*, Cambridge, UK: Cambridge University Press.

Moore, C. and P. Dunham (eds.) (1995) *Joint Attention: Its Origins and Role in Development*, Hillsdale, NJ: Erlbaum.

Nancy, J.-L. (2000) *Being Singular Plural*, Stanford: Stanford University Press.

Overt, H. and M. Carpenter (2013) "The Social Side of Imitation", *Child Development Perspectives*, 7/1, 6–11.

Peacocke, C. (2005) "Nature, Reflexivity and Common Knowledge", in Eilan, N. et al. (eds.) *Joint Attention: Communication and Other Minds*, Oxford, Oxford University Press.

Rizzolatti, G. and C. Sinigaglia (2008) *Mirrors in the Brain: How Our Minds Share Actions and Emotions*, Oxford: Oxford University Press.

Sartre, J.-P. (1956) *Being and Nothingness*, Trans. H. Barnes, New York: Philosophical Library.

Scaiffe, M. and J. Bruner (1975) "The Capacity for Visual Joint Attention in the Infant", *Nature*, 253, 265–266.

Schiffer, S. (1988) *Meaning*, Oxford: Oxford University Press.

Searle, J. (1983) *Intentionality: An Essay on the Philosophy of Mind*, Cambridge: Cambridge University Press.

Searle, J. (1995) *The Construction of Social Reality*, New York: Free Press.

Searle, J. (2010) *Making the Social World: The Structure of Human Civilization*, Oxford. Oxford University Press.

Seemann, A. (ed.) (2011) *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*, Cambridge, MA: MIT Press.

Stein, E. (1917) *Zum Problem der Einfühlung*, München: Kaffke Verlag.

Tomasello, M. (1999) *Human Cognition*, Cambridge, MA: Harvard University Press.

Tomasello, M. (2009) *Why We Cooperate* (Boston Book Series), Cambridge, MA: MIT Press.

Trevarthen, C. (1978) "Communication and Cooperation in Early Infancy: A Description of Primary Intersubjectivity", in Bullowa, M. (ed.) *Before Speech: The Beginning of Interpersonal Communication*, Cambridge: Cambridge University Press.

Trevarthen, C. and P. Hubley (1978) "Secondary Intersubjectivity: Confidence, Confiding and Acts of Meaning in the First Year", in Bullowa, M. (ed.) *Before Speech: The Beginning of Interpersonal Communication*, Cambridge: Cambridge University Press.

Trevarthen, C. (1979) "Instincts for Human Understanding and for Social Cooperation: Their Development in Infancy", in von Cranach, M., K. Foppa, W. Lepenies, and D. Ploog (eds.) *Human Ethology: Claims and Limits of a New Discipline*, Cambridge: Cambridge University Press.

Trevarthen, C. (1993) "The Self Born in Intersubjectivity: The Psychology of an Infant Communicating", in Neiser, U. (ed.) *The Self Perceived*, Cambridge: Cambridge University Press.

Varela, F. and J. Shear (eds.) (1999) *The View from Within: First-Person Approaches to the Study of Consciousness* (Consciousness Studies), Imprint Academic.

Zlatev, J., T. P. Racine, C. Sinha, and E. Itkonen (eds.) (2008) *The Shared Mind: Perspectives on Intersubjectivity*, Amsterdam – Philadelphia: John Benjamins.

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