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THE ROLE OF TACTILITY IN THE CONSTITUTION OF EMBODIED EXPERIENCE

abstract

In this paper I aim at highlighting the role touch plays in comparison to other sensory modalities both in our apprehension of reality and in the development of our bodily self-awareness. I will try to discuss above all the latter topic by showing that touch enjoys an unique status among the senses because of the coincidence between its bodily organ – the flesh – and its material sensory medium. For this essential link with the whole living organism touch ensures at the highest degree our anchorage to the world and exerts an epistemological supremacy since its cognitive performances contribute to establishing a robust sense of reality, by confronting ourselves with the resistance opposed by the things. In its essential connection with proprioception, kinesthesia and bodily feelings tactile perception constitutes the bodily intentionality in its basic form and therefore assures the mutual interplay between different sensory modalities. Another exclusive feature of tactile perception consists in its double function as proprioceptive and exteroceptive direction, as shown by the unique phenomenon of touchant/touché. Husserl and Merleau-Ponty have devoted their attention to the relevance of this experience in generating the bodily self-awareness in its reflexive structure.

keywords

Touch, embodiment, bodily self-awareness, Husserl, Merleau-Ponty

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In spite of the fact that in our philosophical tradition the sense of sight has exerted an indisputable supremacy in comparison with other sensory modalities, it is true that touch plays a key role both in our apprehension of reality and above all in the development of our bodily self-awareness. From Plato to Enlightenment the vast majority of philosophers has unilaterally placed the accent on sight by stressing its privileged status as the true image of intellect (Roth 2012, 43). This fact finds confirmation in the worship of visual image among all expressive forms that pervades our culture almost in its totality. In *On the Soul* Aristotle arranges the five senses according to a hierarchy that culminates with sight and has at its bottom touch as compromised with the most "fleshly" components of the sensitive soul, whereas sight anticipates the high-order performances of intellect. Nowadays this tendency is mirrored in the mainstream attitude of Anglophone philosophy of mind which conceives sight as the epistemological sense par excellence and proposes an approach to sensory experience modelled on the role of perceiver as a passive spectator. Beside of this the distal property of visual perception and its relative independence from the bodily conditions allow the separation between the external world and the experiencing subject (Ratcliffe 2010, 134). As we shall see in the course of our exposition, it is difficult to trace such a sharp boundary line, as shown by the phenomenon of the reversibility between passive and active touch.

The little consideration given to tactility is not enough to play down its essential function in our bodily experience and the complexity of its physiological constitution. Unlike the other sensory modalities, touch requires not a single organ, but a huge amount of mechanoreceptors that are strewn across the whole body surface. The intracorporeal ubiquity of touch has its counterpart in the fact that it goes together with almost all our interactions with the external objects and the other people. The correspondence relation between the body and its environment refers to a functional duplicity which distinguishes touch from the other senses. On the one hand touch as exteroceptive sense is outward oriented since it turns to the objects of the external world in their material features, on the other as interoceptive sense it refers to the body itself and its states. In this latter function touch generates the bodily self-awareness in its self-reflexive structure, whereas this property is not to be understood as a higher-order cognitive performance which

involves a fully developed self-consciousness, but in the narrow sense of a pure sensory self-referring without need of abstract representations (Roth 2012, 48).

Despite the low-ranking position it occupies in his hierarchy Aristotle himself admits that touch is the most basilar sense because of its necessity for the survival of animal organisms. Tact has priority compared with other senses not only as a possibility condition and a general model for them, but also from a phylogenetic point of view, because it is common to all animals, including the less evolved ones (Aristotle, *De an.*, 434 b 20-24). However touch owes its exceptional status to the fact that it does not satisfy the requirement of the distinction between bodily organ and material sensory medium to which the other senses are subject (Paterson 2007, 4-5). The flesh and the whole body are at the same time the medium and the organ of touch so that the apprehension of a tactile quality like dryness can involve both the bodily sensation of dehydration and the perception of an objective feature (e.g. a dry leave). In general terms Aristotle's concept of *aisthesis* is strictly correlated with the sensing body since it includes both physiological aspects like affects and bodily sensations and psychological ones – the perception as high-order activity whose task consists in processing the raw data provided by sensations. The embodied nature of *aisthesis* is already mirrored in its definition as the capacity of an organism to be moved or affected by an external object. This alteration is not to be drawn back to the activity of the objects as such, but it depends on the specific way of alteration the sense faculty undergoes (Paterson 2001, 17-20).

For its essential connection with the living organism touch is among all sensory modalities the one that ensures at the highest degree our anchorage to the world. Touch deserves an epistemological supremacy because its cognitive performances are indispensable for the development of our sense of reality. Nothing attests in so pregnant a way the existence of an external world and of our body than the impacts the environment exerts upon our tactile receptivity. Touch is the less deceptive sense since it corrects the perceptual illusions generated by the sight and allows us to recognize the constancy of shape, size and superficial structure of the objects, despite the modifications these features can undergo in visual perception. The primacy of touch and its chronological precedence are confirmed in the ontogenetic development of humans too. Though the exploratory active touch is not yet developed in newborns and infants, the tactile impressions yielded by the

mouth are enough to communicate them a robust sense of reality and play a fundamental role in nutrition (Katz 1925, 240-241).

Touch competes with sight in apprehending the spatial relations and the objective features of the external world and exhibits therefore a functional kinship with it. However the narrowness of its perceptual field and its proximal range, which depend on the fact that tactile sensations occur only through contact of objects on the cutaneous surface, have led several psychologists to consider touch as an auxiliary sensory modality subordinated to sight (Hatwell 2003, 1). To be sure, the reasons for this negative appraisal are to be traced back on the one hand to the insistence on the performance disparity between touch and sight, on the other to the propensity to treat both as separate and incommunicable sensory modalities. It is rather necessary to consider touch and sight in their mutual interplay and in their common rootedness in the motor capacities of the body. E. Straus (1956) and D. Katz (1925, 79-80) have insisted on the unnatural character of a clear-cut distinction between perception and movement since it splits at the level of reflective consideration what is inextricably united in sensory experience. Having neglected movement as basic condition for perception is a consequence of the atomistic approach of empirical psychology, which devotes its attention to punctual and motionless stimuli. Both sight and touch involve exploratory bodily movements in order to grasp the objects in the full-fledged richness of their spatial and qualitative features. If I want to gain a complete and veridical percept of any object it does not suffice that I lay my hand on it, but I must slide the tips of my fingers along its surface and contours. In the same way the visual apprehension of the object in its manifold sides requires that I turn my head toward it and execute exploratory movements with my ocular bulbs. J. J. Gibson (1962, 477) has carried the analogy between the exploratory functions of sight and touch so far that he speaks of a "tactile scanning" which allows active touch to integrate vision – and to surrogate it in blind people. Conversely Noë (2004, 72-73) refers to Merlau-Ponty's "palpation with the eyes" in order to stress the common sensorimotor constitution of both vision and touch.

Perception is then from its very beginning an eminently motor activity. The spatiality of perceived world and the experience of the localisation of the objects according to the perspective that radiates from the zero-point of the body are possible only for a being capable of moving in its environment. Kinaesthesia – understood in a broader sense as the direct awareness of my

bodily movements – constitutes the spatiality of both the sensing body and the perceived object. Thanks to the bodily movements the manifold sensory appearances are synthesised along an unitary perceptual process and recognized in their belonging to the same and the one thing. Hence the motivating character of kinaesthesia, on which depend both sight and touch as well as the coordination between their sensory schemata (Mattens 2009, 100). According to the late Husserl (1954, 106) and Merleau-Ponty (1945, 112 ss.) the kinaesthetic system coincides with the lived body as common power of motion and sensation since it gives rise to a background of sensorial receptivity that makes possible for every object to be perceived and constitutes therefore intentionality in its most basic form. The call to the essential role of the whole body in grounding perception and action counts for both Husserl and Merleau-Ponty as a vindication of the true nature of sensory experience against the empirical atomism which reduces it to the functioning of segregated sensory organs. Merleau-Ponty's refusal of the notion of sensory *quale* as the sole object of perception entails a radical rejection of the traditional distinction between proper and common senses introduced by Aristotle as well as the one between primary and secondary sensory qualities. We are able to apprehend material features as the texture of a colour or the fragility of a crystal glass only through the integration of different sensory modalities (Moran 2010, 183-184).

The kinaesthetic system exploits the resources provided by sight, touch and proprioception in order to coordinate the position of limbs with the objects in the environment during the execution of explorative movements. From a phenomenological point of view it is very difficult to disentangle these aspects, since the dimension of tactility is coextensive with the kinaesthetic background of our embodied experience and involves the contribution of proprioception (Ratcliffe 2008, 302). During the tactile perception of any object I am at the same time aware of myself as a sensitive and mobile body because every touch experience is both proprioceptive and exteroceptive (Bermùdez 1998, 137) so that it can ground the distinction between self and non-self as well their intrinsic relationship. The holistic character of the lived body as common sensible involves the interplay between tactility and other bodily sensations like proprioception, kinaesthesia and vestibular sense. The intimate relation these sensory modalities entertain with each other has led some authors to include touch under the general heading of "somatosensation" (Serino and Haggard 2010, 224) or to highlight the connection between tactual perception and somatic sensations, conceived

respectively as the transitive and intransitive form of bodily perception (Armstrong 1962, 20). In a similar way Gibson (1962, 478-479) distinguishes in information flow carried by active touch an exterospecific and a propriospecific component whereas the latter one – called "somaesthesia" – covers the broad spectrum of bodily sensation.

If sight prevails over touch as regards the constitution of material objectivity, touch and bodily sensations enjoy a privileged rank for their peculiar role in generating bodily self-awareness, since they allow the emergence of the lived body. Both passive and active touch involve a subjective component oriented toward the body and this applies also to the tactile experiences that seem to concern only objective features. Thanks to a modification of the subjective attitude it is possible to point out in them a qualitative aspect localized in body that offers itself in intuitive evidence and is not merely the product of an indirect inference. The emergence of either the subjective or the objective pole in tactile phenomena depends on the specific bodily localisation: in body parts that are not involved in thing-related tactile perception the subjective aspect prevails, while the objective one comes into prominence when the touch organ is moved (Katz 1925, 41). This attention shift from the objective aspects of tactile perception to the subjective ones involves the own body too, as shown by the phenomenon of touchant/touché which finds its paradigmatic expression in the example of both hands touching with each other cited by Husserl and Merleau-Ponty.

When I touch with my right hand the left one, the touching hand becomes the bearer of presenting tactile sensations, whose function consists in presenting the touched hand – and thus my body – as an objective thing with its material features, like skin texture, smoothness, softness and so on. When instead I turn my attention to the touched hand, I can notice that a field of localised tactile sensations ("sensings" in Husserl's terminology) spreads over its surface. These sensations are fundamentally different from the ones that have presenting function, because they do not give rise to a manifold of perceptual adumbrations like object perceptions, but let manifest to itself the whole lived body in its own sensibility. Thus sensings transmit the experiential quality of bodily ownership that enables me to recognize immediately and without further verifications my hand as my hand. Beside of this sensings unfold an intracorporeal space which constitutes the ground for the tactile construction of the external objective space through the exercise of kinaesthetic sensations in their motivating function. Both

kinaesthetic and presenting sensations are localised in the body and depend on the sensings, which ground the mutual belonging of the different sensorial fields and of the corresponding systems of voluntary movement (Mattens 2009, 104-105). Thanks to the property of reversibility exhibited by the double touch the body can act simultaneously as constitutive subject and constituted object. This feature is absent in other sensory modalities as sight and hearing. Sight can constitute the real objectivity and therefore my body as material thing at the level of body image but can constitute neither its own sensory organ as such nor the whole body as touch does, especially since there are body parts like my backs and my face that cannot fall within my visual field. It is only through a mirror that I can attribute to my eyes the perceptual function they play by making use of the sole resources of sight. In other words, I cannot see my eyes seeing in the same way I can touch my hands touching each with other. I know that I see through my eyes not on the grounds of the perceptual data provided by vision but through the localized tactile sensation of my eyes and the corresponding kinaesthesias which come into play when I move them in order to explore the environment (Husserl 1952, 152-159).

According to Merleau-Ponty (1945, 105-107) instead, my body is prevented to be an object because it is not completely constituted neither through sight nor through touch. The phenomenon of double touch reveals the difference between the touching hand and the touched one, insofar the latter shows itself as a material thing done of bone, nerves, tendons and flesh and the former disappears from the foreground "to reveal the external object in its place" (105). The reversibility between both roles gives rise to a kind of reflection which differentiates the touching hand from the touched one as a part of my living body in the exercise of its power of perceiving and acting in the world (Merleau-Ponty 1960, 166). When my passive hand attends the contact with the active one and anticipates its role, there is no difference from shaking the hand of another person or only seeing it, because I recognize both my living body and the other's one by virtue of an intercorporeal compresence (170-171). The self-othering dialectics disclosed by the phenomenon of double touch anticipates the way another subject experiences my lived body. Bodily awareness is thus affected from its very beginning by the reference to otherness and constitutes a precondition for empathy and the recognition of other persons as embodied subjects (Thompson 2005, 413). More explicitly than Husserl, Merleau-Ponty insists on the mutual permeation between ownership and otherness in the constitution of living body. Ac-

cording to Slatman (2009, 334) Husserl can trace a sharp distinction between the sensing embodied subject and its thing-like materiality only because he has conceived of touch as an isolated sensory modality and has stressed the role of sensings in the genesis of bodily self-awareness only as concerns the isolated subject in its indexical "here". For Merleau-Ponty on the contrary there is no substantial difference between touch and sight as regards the possibility of (not) constituting the living body and there is no reason to ascribe to sensings any particular role in generating bodily ownership, because the self-attribution of a bodily part presupposes already the identification of the subject with a lived body that is already "there" (Carman 1999, 222). The relation between touching and touched is not to be interpreted in the sense of a coincidence but as a gap that can be filled neither by consciousness nor by the body itself. This difference points out to the flesh as an ontological mixed genus which grounds on the one hand the coexistence of lived body and material body, on the other the reciprocal belonging of the embodied subject and the world (Merleau-Ponty 1964, 254-257).

As a tentative conclusion I will try here to foreshadow a comparison between Husserl's and Merleau-Ponty's contrasting positions about the role of tactility in the constitution of *Leib*. In the first place Husserl seems more attentive than Merleau-Ponty to highlight the gradual constitution of the experience of the own body in its different layers of sense through the conceptual tools offered by his regressive analysis. In this way Husserl can succeed in identifying in the localized sensations and in the corresponding kinaesthesias the minimal conditions for bodily self-awareness and intentionality. The gestaltic holism which characterizes Merleau-Ponty's philosophy of body is incompatible with Husserl's analytic-regressive approach, since the former recognizes in the *Leib* an always already given and constituted structure without any concern for its genesis. For this ground Husserl's approach is more suitable than Merleau-Ponty's one in order to obtain a rigorous description of bodily self-awareness as concerns the possibility of grounding a neurophysiologic investigation of its conditions of realization (Petit 2006). Secondly, Merleau-Ponty muddles up the different components of bodily awareness whereas Husserl tries to keep them distinct. The category of flesh as mixed genus blurs every distinction between lived body and material body on the one side, proper body and other body on the other. On the contrary Husserl can keep these differences by pointing out the integrating function of the palpating hands. Taking an object in hand sanctions its belonging to the system of *Leib* as its extension, while the mutual touch

of both hands leads to an operation of self-constitution which enables by means of the localized sensations the transition from the perception of the body as object to the perception of the body as sensing and acting subject. Thirdly, in spite of the usual contraposition between Merleau-Ponty's apparent emphasis on intracorporeality and Husserl's solipsism, Husserl takes into account the circumstance that the single subject has only a partial and limited perspective on his own body and that its complete apprehension implies the constitution of intersubjectivity which is accomplished only at a further stage. This happens through an emphatic apperception which exploits the same tactile localized sensations that drive the constitution of lived body at the level of the solipsistic subject, by transposing them analogically on the other's body. "The full appreciation of others as persons like us depends upon the involvement of body-related first-person tactile experiential knowledge" (Gallese 2005, 40). This suggests that Husserl is right in maintaining that the own lived body is not primarily constituted by alterity, which plays an integrating role and makes up a further layer of sense in comparison to the solipsistic constitution.

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