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Embodiment on trial: a phenomenological investigation

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Abstract This paper considers dimensions of animate life that are readily "embodied" by phenomenologists and by other philosophy and science researchers as well. The paper demonstrates how the practice of "embodying" short-circuits veritable phenomenological accounts of experience through a neglect of attention to Husserl's basic conception of, and consistent concern with, animate organism. The paper specifies how in doing so, the practice muddies a clear distinction between the body 'I have' and the body 'I am', and a clear account of their lived conjunction in existential fit. In turn, the paper shows how the practice falls short of recognizing synergies of meaningful movement created by animate organisms; how it is tethered to talk of posture and sensation over kinesthesia and dynamics; and how, in general, the practice of embodying generates static rather than dynamic understandings of everyday life. The paper then critically considers how such liabilities preclude in-depth phenomenological insights into topics such as 'ownership' and 'agency,' and why inquiries into the nature of animate organisms require nothing less than fine-tuned attention to foundational experiences of animate life, including foundational ontogenetical experiences that undergird adult proficiencies and abilities, and hence fine-tuned attention to learning and to retaining what is learned in kinesthetic memory.

Keywords Animate organism · Embodied mind · Ownership · Agency · Dynamics · Kinesthesia

1 Introduction

The current and pervasive practice of 'embodying' in present-day philosophical and scientific writings is an epistemologically and ontologically improper practice verging on phenomenological malpractice. Epistemologically speaking, the practice

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commonly skirts the challenge of addressing and elucidating the seeming problem of "the body" in a sufficiently meticulous phenomenological manner with respect to a virtually endless series of entities or topics. Consider the following embodied entities or topics, for example: mind, self, subject[1]; experience[2]; action[3]; self-experience[4]; subjectivity[5]; language.[6] Other dimensions of animate life are similarly embodied, including even movement[7]and existence itself.[8] Ontologically as well as epistemologically speaking, the practice solidifies the body in ways that fall short of, or ignore altogether its essential dynamics and the familiarity of those essential dynamics as, for example, in talk of "embodied action"[9] and of "action" by an "embodied perceiver."[10] In short, the practice bottles a body's kinetic dynamics into a convenient and immediately recognizable lexical container, and in a way that is commonly adultist, i.e., whatever the "action," it is taken as an innate ready-made.[11]

A return to Husserlian texts is edifying in both respects. To begin with, Husserl did not write about *embodied* organisms, or even *enactive*, *embedded*, or *extended mind* organisms. He wrote about *animate* organisms. Furthermore, he explicitly recognized what he termed the "root soil"[12] and the "comet's tail of nature"[13] with respect to animate organisms, identifying in particular what he termed "affect and action," acknowledging that these dimensions of *animate organism* were not being thoroughly examined by him. At the same time, however, he quite explicitly recognized "the kinestheses" not only as essential to perception, but as co-articulated with perception. In short, the current and pervasive practice of embodying would do well to cease its malpractice by acknowledging epistemological and ontological lapses, by presenting finer phenomenological analyses of particular topics with respect to "the body," and by rising to the epistemological and ontological challenge that a veritable animate organism, an experiencing "lived body," presents. I begin by specifying needed lexical clarifications, and then, taking as critical point of departure a particular current volume in phenomenology that relies in good part on the writings of Merleau-Ponty, suggest directions that finer phenomenological analyses and elucidations of an experiencing lived body might take.

[1] Gallagher and Zahavi (2012).

[2] Gibbs (2006).

[3] Gallagher (2005).

[4] Zahavi (2005).

[5] Hanna and Thompson (2003), Zahavi (2005), Jensen and Moran (2013).

[6] Gibbs (2006).

[7] Gallagher and Zahavi (2012, p. 109), Varela and Depraz (2005, p. 69), Gallagher (2005, p. 105), Gibbs (2006, p. 127, 130, 134).

[8] Gallagher and Zahavi (2012, p. 8).

[9] Gallagher (2005, p. 74).

[10] Gallagher and Zahavi (2012, p. 161).

[11] Gallagher and Zahavi (2012, see e.g., p. 164).

[12] Husserl (1989, p. 292).

[13] Husserl (1989, p. 350).

2 Needed lexical clarifications

In their most common everyday meaning, the verb 'embody' and the noun 'embodiment' signify possible ways of being in the world that carry a moral measure of one kind or another, that is, that have a moral weight. One says, for example, that someone embodies or is the embodiment of courage, evil, thrift, or compassion. Whatever the particular feature or character of the person, it is something integral to the person, and that feature or character is described as palpably present by way of examples that substantiate the feature or character, that is, by way of instances in which the feature or character is clearly personally evident. Many if not most academic practitioners of embodiment are guilty of malpractice precisely because they fail to provide exacting bodily grounds for the integral nature of the feature or character they are embodying, whether self, subjectivity, mind, cognition, or whatever. They are not surreptitiously adding a body and stirring, though in a metaphorical sense it might in some instances seem that they are. What they are doing is forthrightly packaging the subject of their concern into a readily available pre-existing and pre-formed material container with a readily available linguistic signifier, namely, the all-purpose lexical band-aid of embodiment and its lexical derivatives. In effect—one might even say "Presto!"—there is no mind-body split, no self-body split, no subjectivity-body split, no language-body split, and so on. In truth, however, the academically significant and philosophically loaded feature or character remains corporeally unplumbed and unfathomed. Though it is given a home in a body through the magic of embodiment, it is not thereby epistemologically or ontologically redeemed. On the contrary, its physically solid and seemingly permanent ontological footing is statuesque rather than dynamic. In virtue of being not just packaged but preserved in something solid, its embodiment indeed verges on embalmment.

A second lexical clarification centers on the need to distinguish between being a body and having a body. In his classic text *Phenomenology of Perception,* Merleau-Ponty writes of the "embodied subject."[14] In this context he writes of having a body and states that "Saying that I have a body is … a way of saying that I can be seen as an object and that I try to be seen as a subject." He goes on to conclude that "What we try to possess, then, is not just a body, but a body brought to life by consciousness."[15] Presumably, "a body brought to life by consciousness" is precisely an embodied subject, a subject whose body is a veritably possessed lived body. Thus, though Merleau-Ponty affirms, that "To be a body, is to be tied to a certain world,"[16] he commonly writes also of having a body in the same or similar terms. For example, he affirms: "… I have a body through which I act in the world …"[17]; "I have a body, and … through that body I am at grips with the world"[18]; "The normal subject has his body not only as a system of present positions, but

[14] Merleau-Ponty (1962, p. 154).

[15] Merleau-Ponty (1962, p. 167).

[16] Merleau-Ponty (1962, p. 148).

[17] Merleau-Ponty (1962, p. 140).

[18] Merleau-Ponty (1962, p. 303).

besides, and thereby, as an open system of an infinite number of equivalent positions directed to other ends"[19]; "It is as much of my essence to have a body as it is the future's to be the future of a certain present… Moreover, it is essential to me not only to have a body, but to have *this* body."[20] In light of Merleau-Ponty's seeming indiscriminate use of being and having with respect to "the body," we may ask whether a distinction is in fact unnecessary since the locutions are apparently close enough to be equivalent, hence, whether there is in fact any credible distinction to be made, or, on the contrary, whether the lack of a distinction is a matter of phenomenological oversight, even unwitting carelessness.

An answer tied to the ever-ready and all-serviceable notion of embodiment might claim as follows: having a body means possessing a body, not only a body one owns, but an objective physical entity in the world, hence something that can embody a subject, a mind, a self, subjectivity, and so on, in the same way that it embodies a liver, a spleen, a cardiovascular system, and so on, and even a brain. If I am my body, however, I live it directly in all its dimensions: its run of feelings, images, movements, choices, thoughts, impulses, pains, memories, dispositions, and so on, and thus directly live it as well in being the embodiment of greed or generosity, for example. In the course of living this run of experiences and qualities of personhood directly, the body I am clearly encompasses the body I have, as when, in line in a cafeteria, I feel ravenously hungry but choose to split the last available entree with the person behind me who has not yet eaten either. In short, the body I am and the body I have—lived and physical bodies—are not disjoint but inherently related: *an existential fit* obtains between the two.[21] As I have elsewhere shown, their inherent existential fit—indeed their existential fitness—defines a certain kind of "livability" in the world.[22]

Thus, to take up where Merleau-Ponty left off: "to have *this* body" is *to be* too short-legged to be a runner; "to have *this* body" is *to be* a woman; "to have *this* body" is *to be* capable of singing opera; "to have *this* body" is *to be* cancer-prone; and so on. In equal measure, the body I am imparts its livability upon the body I have, as when I ignore the chill I feel and continue skiing, or when I stay up partying too late and feel too groggy to work the next morning, or when I am determined to continue practicing this difficult passage in a Chopin polonaise, painful fingers and arms notwithstanding. In short, the body I am is existentially of a piece with the body I have and the body I have is existentially of a piece with the body I am. To have and to be are existentially intertwined. Merleau-Ponty might seem to affirm this existential fact of life when he states that "it is essential to me not only to have a body but to have *this* body," i.e., "*this* body" *is in truth the body I am*. As he elaborates the claim, however, what he terms "the phenomenal" body and "the objective" body exist not in a relationship of existential fit but in a deterministic, destiny-laden, and ultimately one-sided relationship that is unchangeable: that I

[19] Merleau-Ponty (1962, p. 141).

[20] Merleau-Ponty (1962, p. 431).

[21] Sheets-Johnstone (1986/2009).

[22] Sheets-Johnstone (1986/2009).

have these "ears, nails, and lungs," he states, and that "I was destined to be dexterous or clumsy, placid or highly strung, intelligent or stupid, in short whether I was destined to be myself"—all are aspects of "the phenomenal body, that is, the true version of the body that we live"; the objective body, he states, is "no more than the latter's impoverished image."[23] Thus, while ears, nails, and lungs are properly part of my destiny to be the body I am, they are physical aspects of the body I have, aspects that define an emaciated and wanting version of the body I am. Thus too, if as Merleau-Ponty also affirms, what we "try to possess" is "a body brought to life by consciousness," these aspects are wanting in "consciousness." Puzzlingly enough, however, these conceptual renditions of destiny, possession, and consciousness in relation to lived and physical bodies epistemologically contradict statements quoted earlier—for example, the statement, "I have a body, and … through that body I am at grips with the world." Surely if the body I have is an impoverished version of the body I am, it cannot possibly be the body with which I am "at grips with the world." Clearly, clarification is needed with respect to contradictory renditions of being a body and having a body.

Specified earlier was the fact that the body I am "embodies" only in the common everyday sense of embodying a feature or character such as compassion. As clarified earlier too—Merleau-Ponty's contradictory conceptions apart—the body I have can embody such things as a self as well as a liver only because being a physical entity, it is readily conceived, perhaps conceived even basically, as a container.[24] A seminal question is thus whether the body I am can also be a "packager," so to speak, that is, whether it can properly embody in the current and pervasive sense of embodying self, action, mind, cognitions, and so on. Notwithstanding its being existentially of a piece with the body I have, *can the body I am be such an embodier, or is it already, precisely as lived, of a piece with mind, self, action, cognitions, and so on*? An answer to this question is pivotal not only to phenomenological elucidations of the body I have and the body I am, but to a fundamental distinction that Gallagher and Zahavi draw and emphasize between agency and ownership.[25] Though unacknowledged, certain phenomenological understandings of the body I am and the body I have are in fact pivotal to their distinction. The embodiment plot thus thickens. It thickens even further when we ask the seminal question of just who or what might be the "I" that *has* a body, the "I" that is "the normal subject [who] has his body not only as a system of present positions, but … as an open system of an infinite number of equivalent positions directed to other ends."[26] To suggest answers to these seminal questions in this thickened context, let us take as example the progenitor of embodiments, namely, "embodied mind," not as originally enactively conceived by Varela, Thompson, and Rosch,[27] but as most recently elucidated phenomenologically by Gallagher and Zahavi.

[23] Merleau-Ponty (1962, p. 431).

[24] See, for example, Lakoff and Johnson (1980), Johnson (1987).

[25] Gallagher and Zahavi (2012); see also Gallagher (2005, 2012).

[26] Merleau-Ponty (1962, p. 141).

[27] Varela et al. (1991). An earlier analytic book titled *The Embodied Mind* offers a thoroughgoing investigation of alternatives to Cartesian claims. It supports a subject-object view akin to that of Brentano and even asks in its conclusion, "Could there be a disembodied mind?" See Vesey (1965).

3 Embodied mind and the short-circuiting of experience

In their 2012 second edition account of "the embodied mind," Gallagher and Zahavi point out that the term was intended to situate cognition and consciousness in the living world, hence to "embody" cognition and consciousness. It is nevertheless odd that in both the earlier and later editions of the book, in their chapter titled "The Embodied Mind," and in particular in their discussion of embodied cognition, they do not center attention on an *animate*, i.e., veritably dynamic, *corps engagé* exposition of mind and cognition. Their examples are postural and static, as in "know[ing] whether my legs are crossed, or not" or as in the fact that "I perceive that something is to my right or to my left only by having a proprioceptive sense of where my right is and where my left is, 'knowing' my right hand from my left hand, my right leg from my left leg."[28] A preeminently posturally-tethered body is a dynamically emaciated body, one that falls short of being recognized as an animate organism. Of fundamental epistemological moment too is the fact that Gallagher and Zahavi specifically define "proprioceptive sense" as "the innate and intrinsic *position* sense that I have with respect to my limbs and overall *posture*."[29] In short, their emphasis throughout is on two claims: the claim that "our attention is not on our bodily movement"[30] and the claim that "[the] pre-reflective experience or sense that I am the subject of the movement (e.g., the kinaesthetic experience of movement)" is a matter of "ownership."[31]

Given such claims, it is no wonder that the dynamic realities of life itself, the dynamic realities of animate and animated bodies, are nowhere elucidated in phenomenological depth. While it is surely understandable that Gallagher and Zahavi's aim is to show how analytic philosophers and cognitive scientists can prosper from phenomenological investigations—their own investigations as well as those of Husserl, Merleau-Ponty, Heidegger, and Sartre—and how a reverse prospering is of equal significance, their avoidance of any substantive descriptive accounts of movement and kinesthesia is indicative of a gap in their own phenomenologically-based understandings of *animate life*. Their mention of Husserl's finely detailed account of "the kinestheses" is indeed minimal.[32] It falls short of demonstrating the sizable cognitive implications of kinesthesia as does their account of "conceptuality" that ignores the fact that kinesthesia and tactility are the first sensory systems to develop neurologically in utero, that fetuses move in utero, and that, not surprisingly, infants come into the world moving and kinesthetically experience their movement, not in terms of ownership, but in terms of immediately and directly felt dynamic intensities, amplitudes, momentum, and so on. Moreover in the process of moving, an infant discovers what Husserl specifies and describes as if/then relationships, basic, even foundational relationships such as, "if I close my eyes, it is dark"; "if I move my lips and tongue in certain ways, I hear certain

[28] Gallagher and Zahavi (2008, p. 143, 144, respectively; 2012, p. 162, 163 respectively).

[29] Gallagher and Zahavi (2012, p. 162; italics added).

[30] Gallagher and Zahavi (2008, p. 145, 2012, p. 164).

[31] Gallagher and Zahavi (2008, p. 161, 2012, p. 180).

[32] Gallagher and Zahavi (2012, pp. 110–111).

sounds." Just such kinesthetically felt and cognized experiences ground the faculty that Husserl identifies as the "*I-can* of the subject,"[33] a faculty that engenders a repertoire of abilities and possibilities. That faculty is straightforwardly apparent in older infants who discover, for example, that "I can close my mouth and turn my head so that the spoon filled with food cannot be put into my mouth." Of definitive moment too in this context is Husserl's critical and commonly overlooked insight that "*I move" precedes "I do" and "I can.*"[34] Movement is indeed our mother tongue.[35] In short, basic cognitions are saturated in concepts that derive from movement, concepts of distance, as in reaching: is the glass near or far?; concepts of size: is the glass narrow or wide, i.e., how small or large must I form my grasping hand?; etc. It is insufficient to discuss "skills and abilities" without inquiries into the concepts that come with them and the learning that grounds them.

Furthermore, with respect specifically to "conceptuality," Gallagher and Zahavi turn to a linguistically and visually-tethered phenomenology[36] that hews not to any of the four essential steps they so meticulously point out earlier in their exposition of phenomenological method.[37] In giving preeminence to language over experience, they ignore Husserl's warning about the seduction of language: "It is easy to see that even in (ordinary) human life, and first of all in every individual life from childhood up to maturity, the originally intuitive life which creates its originally self-evident structures through activities on the basis of sense-experience very quickly and in increasing measure falls victim to the *seduction of language*. Greater and greater segments of this life lapse into a kind of talking and reading that is dominated purely by association; and often enough, in respect to the validities arrived at in this way, it is disappointed by subsequent experience."[38]

It is notable that, like Husserl, infant psychiatrist and clinical psychologist Daniel Stern remarks upon a certain lack of fit between language and experience. Most notably he observes a "slippage between experience and words." He finds that experiences of self having to do with a sense of coherence and continuity, for example, "fall into a category something like your heartbeat or regular breathing" and goes on to remark that "periodically some transient sense of this experience is revealed … with the breathtaking effect of sudden realization that your existential and verbal selves can be light years apart, that the self is unavoidably divided by language."[39] That Gallagher and Zahavi give preeminence to language not only contrasts with Husserl's and Stern's insightful observations, but omits recognizing and acknowledging *the challenge of languaging experience* in the first place.[40]

[33] Husserl (1989, p. 13).

[34] Husserl (1989, p. 273; see also Landgrebe 1977).

[35] Sheets-Johnstone (1999/expanded 2nd ed. 2011).

[36] Gallagher and Zahavi (2012, pp. 112–117).

[37] Gallagher and Zahavi (2012, p. 31). The four steps they list are: the epoché, the phenomenological reduction, eidetic variation, and intersubjective corroboration.

[38] Husserl (1970, p. 362; italics in original).

[39] Stern (1985, p. 181).

[40] Sheets-Johnstone (2009).

Added to this short-circuiting of experience by language is the fact that fundamental human concepts are in fact generated in movement. An infant experiences itself sucking, breathing, smiling, and so on, each as a distinctive kinesthetic dynamic. In particular, it does not experience only the facial gestures of others as Gallagher and Zahavi seem to indicate by their skewed "ownership" understanding of kinesthetic experience.[41] That fundamental human concepts—concepts such as hard and soft, in and out, strong and weak, near and far, smooth and jagged—derive from the tactile-kinesthetic body is directly relevant not only to everyday adult perceptions and cognitions but to infant perceptions and cognitions, hence to the topics of "embodied mind" and "embodied cognition." For example, the tongue is the tactile-kinesthetic organ of felt objects in the world as well as, *and in fact before it is,* the tactile-kinesthetic organ of spoken words. As such it is the source of corporeal concepts, nonlinguistic concepts such as round, flat, soft, hard, wet, and dry. Cognitive elaborations along conceptual lines of Husserl's "two-fold articulation of perception and movement"[42] might in fact utilize not only ontogenetic examples but draw upon facets of our evolutionary history—as in elucidating the basis of anthropologists' claim that stone tools replaced teeth, i.e., showing through phenomenological analysis how core tools are analogous to molars and flake tools to incisors, and further, how analogical thinking is basic to human thinking and basically corporeal.[43] In a still broader evolutionary sense, particularly in light of Husserl's consistent recognition and references to nonhuman animals,[44] cognitive—even *mindful*—elaborations along conceptual lines are possible, showing that *animate organisms* are forms of life that move, and move in efficient and effective ways in relation to their surrounding world, thereby creating *synergies of meaningful movement*[45] that, at the most basic level, constitute synergies on behalf of their own survival, precisely as the making and using of stone tools demonstrates.[46] To recognize these synergies is to recognize dynamics, in particular, the *coordination dynamics*[47] that inform life both neurologically and experientially, hence, that engender both physical and lived bodies, the body I have and the body I am, and in fact attest to their existential fit and the livability that fit engenders.

Directly related to Gallagher and Zahavi's preference for postures and positions over the experienced dynamics of bodily life—the dynamic patterns that clearly constitute the lives of animate creatures, humans included—is not only a consistent occlusion of dynamics in favor of "sensations," but a consistent elevation of proprioception over kinesthesia, a prominence that is theoretically not surprising. Being viewed as providing essentially postural and positional information,[48]

[41] Gallagher and Zahavi (2012, p. 180).

[42] Husserl (1989, p. 63).

[43] Sheets-Johnstone (1990).

[44] Husserl (e.g., 1989, p. 35, 61, 96, 185, 351).

[45] Sheets-Johnstone (2011a, b, c, d, 2012).

[46] Sheets-Johnstone (2011a).

[47] Kelso (1995, 2009), Kelso et al. (2013), Kostrubiec et al. (2012).

[48] Gallagher and Zahavi (2012, p. 162, 237), Gallagher (2005, e.g., p. 43).

proprioception precisely (if not necessarily) favors sensations.[49] Gallagher and Zahavi's understanding and elevation of proprioception appears to be based on Sir Charles Sherrington's original coinage of the term and his focal emphasis on "the perception of where the limb is."[50] Yet it is not proprioception but *kinesthesia* that provides us a felt sense of the dynamics of our movement, its expansiveness, sluggishness, explosiveness, jaggedness, its changes in direction, intensity, range, and so on. It is thus kinesthesia that is the bedrock of our learning our bodies and learning to move ourselves to begin with, and of our learning new abilities and skills as we mature.[51] Not surprisingly, then, it is kinesthesia that is the bedrock of our ultimate *kinesthetic familiarity* in carrying out our everyday activities in the world, that is, in our moving through all those dynamic patterns that constitute the habits of our everyday life, habits such as brushing our teeth, drying ourselves after a shower, parking the car, writing our name, breaking an egg into a bowl, sawing a piece of wood, and so on, and so on—all of them *coordinated kinetic dynamics* that precisely allow us, *on the basis of their kinesthetically-felt dynamic familiarity*, to attend focally to whatever the task at hand or the goal to be accomplished without our monitoring our movement every step of the way. Nothing is explained by saying that "'My arms know how to swim, my mouth can at last speak the language…. A skill has been incorporated into my bodily 'I can'" in an attempt to show how we can acquire new abilities through practice and thus "cope skilfully [sic] with new arising situations," hence not "conceive the body as something static, as if it has a fixed set of skills and abilities."[52] Nothing is explained, much less *elucidated*, without bringing in *the living dynamics of movement—the coordination dynamics*—that are grounded in the *experienced* qualitative dynamics of kinesthesia, experienced qualitative dynamics that, *when learned*, inhere in kinesthetic memory.[53] Indeed, what is essential is *a phenomenology of kinesthetic learning*, a fleshing out of the developing awarenesses—felt, perceptual, cognitive—that constitute the knowledge, skills, and abilities of everyday life, and even a defining of those awarenesses as they develop in terms of "the body I have" and "the body I live." As famed neuropsychologist Alexsandr Luria shows in finely detailed neurological and experiential detail, kinesthesia has to do with muscular innervations and denervations, which allow both the smooth flow of movement and the attainment of "complex sequential activities" such as writing one's name and

[49] Gallagher also refers to proprioception in terms of an "awareness of movement," i.e., "proprioceptive awareness of movement may be the very first kind of consciousness to emerge in the developing nervous system" (Gallagher 2005, p. 105). However, he also goes on to question whether "proprioceptive awareness [is] really a form of consciousness" and concludes that it "functions only as part of an ecological structure," hence that it is a matter of "ownership": "the experiential differentiation between self and non-self" (ibid., pp. 105–106).

[50] Sherrington (1953, p. 249).

[51] Sheets-Johnstone (1999/expanded 2nd ed. 2011).

[52] Leder (1990. p. 31), quoted by Gallagher and Zahavi (2008, p. 138), Gallagher and Zahavi (2012, p. 157).

[53] Sheets-Johnstone (2003, 2009, 2011b).

calculating a sum, attainments Luria aptly terms "kinesthetic melodies."[54] We do not have to wait for "something to go wrong," as received wisdom dictates, in order to become aware of our everyday kinesthetic melodies. We have direct lines—kinesthesia and kinesthetic memory—to those dynamic patterns that constitute our everyday lives because we have precisely learned them and experienced them in the process of learning.

4 Kinesthesia

A final word about kinesthesia, namely, that it actually *is*—and should thus *be*—of import in both phenomenological and cognitive discussions of "agency." Its seminal import was implicitly acknowledged by well-known and highly respected neuroscientist Marc Jeannerod, who wrote not only that "kinesthetic cues … are 'first-person' cues in the sense that they can only conceivably arise from the self," but that "There are no reliable methods for suppressing kinesthetic information arising during the execution of a movement."[55] Its seminal import was furthermore empirically and even classically demonstrated ontogenetically in an experiment by Stern. Significantly enough, Stern describes the experiment under the heading "Agency" in a chapter of his book *The Interpersonal World of the Infant*.[56] The chapter is titled "The Sense of a Core Self"; the section in which "Agency" is discussed is titled "The Identification of Self-Invariants." The experiment took place at a university hospital where Stern was teaching and where Siamese twins were born. The twins were attached ventrally, between umbilicus and sternum and thus faced each other. The experiment turned on the response of each twin who, while sucking her own fingers or the fingers of her twin, experienced the fingers being pulled away, the experimenter pulling on that particular twin's arm. Stern and colleagues discovered that when the twin was sucking her own fingers, she resisted her arm being pulled away and thus resisted her fingers being dislodged from her mouth. In contrast, when she was sucking the fingers of her twin, she strained her head forward in pursuit of the withdrawing fingers but made no resistant movement with her arm. Clearly, the twins had not a *postural* sense of themselves, but a tactile-kinesthetically anchored felt experience of the bodies they are, a *dynamic* sense of themselves that confirms not only *a sense of "I govern"*—the phenomenological ground of "a sense of agency"—but an integrated and holistic experience based specifically on the *kinesthetically felt experience of oneself* and the *tactilely felt perceptual experience of an object other than oneself*. The experiment does *not*

[54] Luria (1966, 1973). We might note incidentally that while there are no academic departments of "proprioceptology," there are departments of kinesiology, departments devoted to the study of the neuromuscular system. However transmogrified by a motorology, as in "motor control," "motor skills," and the like, what is being studied are realities of human movement, realities specified in the neurophysiological body but experienced in various ways as lived realities, both in normal and impaired movement (as in sport injuries and physical therapy after a stroke); realities that in other words resonate in living animate bodies, hence in kinesthesia and everyday kinesthetic melodies.

[55] Jeannerod (2006, pp. 55–56).

[56] Stern (1985, pp. 78–79).

confirm either "the experience" or "the sense" of "ownership." On the contrary, it confirms aspects of Stern's description of a core self that includes *self-agency*, *self-coherence*, *self-affectivity*, and *self-history*.[57] What indeed could be more telling of *self*-consciousness, its foundation and presence from infancy and even prenatal development and experience onward than the different and highly distinctive movements of the twins in relation to different fingers being pulled away from their mouths? In sum, whatever the distinction Gallagher and Zahavi might make between the 'experience' of ownership and the 'sense' of ownership, it would in fact be absurd to impute "ownership" to the twins—as Gallagher and Zahavi put it, to either "the pre-reflective experience or the sense that I am the subject of the movement."[58]

It is pertinent to point out in this context too that to say that "I have a proprioceptive sense of whether I am sitting or standing, stretching or contracting my muscles," and to claim that "these postural and positional senses of where and how the body is … are what phenomenologists call a 'pre-reflective sense of myself as embodied'[59] are a phenomenological overreach in both instances. While we may certainly "sense ourselves" stretching, for example, and contracting, we do not have a "sense of ourselves" stretching or contracting *muscles*, at least not in the everyday sense Gallagher and Zahavi describe.[60] We have direct and immediate experiences not of *muscles* but of *movement*, and in particular, of distinctively different kinesthetically-felt spatial dynamics in stretching and contracting, and in fact, distinctively different overall dynamics that include temporal and intensity differences between the two kinds of movement, i.e., stretching and contracting, precisely as Luria's descriptions of movement and "complex sequential activity" as *kinesthetic melodies* pinpoints. Nor does the "proprioceptive sense" that I am sitting or standing, for example, phenomenologically translate into a "pre-reflective sense of myself as embodied." Just as it was questioned earlier at the end of section I, just who or what is the "I" that *has* a body, so we may ask here, just who or what is this pre-reflective "myself" that is embodied? The term "embodied" here as elsewhere seems to serve simply as a lexical wrap-around that any bona fide subject written or spoken about is never without. While the adjectival term may assure readers or listeners that their "actions," their postures and positions, and even their thoughts (not to mention their minds) are never without a body, the term is in truth a lexical band-aid that not only covers over a still suppurating 300+-year-old wound,[61] but that covers over the need to return with due phenomenological austerity, i.e., methodological rigor, to the things themselves, in this instance, to the qualitative dynamic realities of kinesthesia.

A further critical point is of particular moment in this context. Gallagher and Zahavi point out that "In the normal experience of intentional action, these two

[57] Stern (1985, p. 71; italics in original).

[58] Gallagher and Zahavi (2012, p. 180).

[59] Gallagher and Zahavi (2012, p. 155).

[60] To isolate a single muscle contraction, not to mention isolating a series or conjunction of muscle contractions, is indeed an extraordinary feat if mastered and accomplished at all.

[61] Sheets-Johnstone (2010, 2011c).

aspects [agency and ownership] are close to indistinguishable."[62] Given their near indistinguishability in "normal experience," it is hardly surprising that Gallagher and Zahavi rely on pathology and on "involuntary action" to exemplify precisely what they mean experientially by 'ownership'. With respect to "involuntary action," they state that when "someone pushes me from behind, I sense that it is my body that is moving—it is *my* movement, not someone else's, so I experience ownership for the movement."[63] As to pathology, they draw on testimony from a schizophrenic patient who "can say [when questioned], 'This is my body that is moving'."[64] That their exemplifications of ownership hinge pivotally on "involuntary action" and pathology raises genuine phenomenological questions as to just how such exemplifications pertain to the normal. Apart from the fact that "ownership" hardly seems a precise and exacting descriptive term for the experience of "involuntary action," it is of moment to note with respect to pathology that, as pointed out elsewhere, "Radical distortions can *add* something, something totally aberrant, and thus confound causal reasoning from the pathological to the normal."[65] To put the point tersely in terms of a question: "Can empirical facts (about pathology) lead to existential truths (about the normal)?"[66] In support of a skeptical if not negative answer to this question, consider the fact that two brain neuroscientists in their article titled "The Organization of the Brain" point out that destruction of the subthalamic nucleus "leads to the motor dysfunction known as hemiballism, in which the patient uncontrollably makes motions that resemble the throwing of a ball." They in turn ask, "Is the normal function of the intact subthalamic nucleus therefore the suppression of motions resembling the throwing of a ball?" Their answer, "Of course not; the condition represents only the action of a central nervous system unbalanced by the absence of a subthalamic nucleus."[67]

Gallagher and Zahavi's reliance on "involuntary action" and pathology aside, their attempted experiential definition of 'ownership'—"the pre-reflective experience or sense that I am the subject of the movement (e.g., the kinaesthetic experience of movement)"—is actually puzzling in the extreme. On the one hand, they define kinesthetic experience as a direct and immediate experience insofar as "I am the subject of the movement."[68] On the other hand, they indicate that "the kinaesthetic experience of movement" is virtually nowhere in experience since we are "goal-oriented": "I do not have observational access to my body in action" but only "non-observational proprioceptive and kinaesthetic awareness of my body in action."[69] They go on to explain that we have a "prereflective awareness of our body in general terms" such as "running, walking, sitting, standing," and that this

[62] Gallagher and Zahavi (2012, p. 44).

[63] Gallagher and Zahavi (2012, p. 44; see also pp. 179–180).

[64] Gallagher and Zahavi (2012, p. 180).

[65] Sheets-Johnstone (1990, p. 286).

[66] Sheets-Johnstone (1999, p. 276, 2011a, b, c, d, p. 240).

[67] Nauta and Feirtag (1979, p. 88).

[68] Gallagher and Zahavi (2012, p. 180).

[69] Gallagher and Zahavi (2012, p. 162).

"pre-reflective" awareness derives from the fact that "The body tries to stay out of our way so that we can get on with our task; it tends to efface itself on its way to its intentional goal."[70] In short, and as quoted earlier: "Our attention is not on our bodily movement."[71] Given such lack of attention, i.e., "non-observational access to my body in action," any "experience or sense of ownership" of my bodily movement is by its very nature *hors de la question*. i.e*., hors d'une recherche vraiment phenomenologique de la kinesthésie.* Jeannerod's affirmation of the insuppressibility of kinesthesia during the execution of any movement seals the verdict definitively on empirical grounds.

The kinesthetic experience of movement is indeed of a particular qualitative kinetic dynamic—not of ownership. "Ownership" is in fact an adult concept and a third-person term, a strictly objective, even culturally-derived and culturally-anchored observation, specifically in this context, *a reflective and thoroughly linguistic specification of the body I have*, precisely as Gallagher and Zahavi recognize in their quote from a schizophrenic subject who says, when questioned, "This is my body that is moving."[72]Apart from the fact that what I have I may own—a car, a computer, a plot of land—to speak of ownership of one's movement is phenomenologically vacuous. Such ownership is not a phenomenological datum. While one might well claim on the contrary that Husserl's "reduction of transcendental experience to the sphere of ownness"[73] definitively validates "ownership," such a reduction does no more—and no less—than separate "I" from "others." In short, it validates difference, individuality, or singleness; it does not validate "ownership." As Husserl himself succinctly observes, following the reduction, "I '*alone*' remain."[74] Husserl's interest is clearly not in "ownership" but in how "the transcendental onlooker … constitutes within himself the distinction between Ego and Other Ego."[75] To turn the "sphere of ownness" into ownership or "mine" or "mineness"[76] is to transmogrify my "aloneness" into a series of possessions or havings. In effect, it is to distort the phenomenological realities that Husserl identifies as engendered in an animate organism that is "*uniquely* singled out."[77] Within the spectrum of bodies within Nature, Husserl emphasizes that that *uniquely* singled out body is "the only one of them that is not just a body but precisely *an animate organism*."[78] As that "*uniquely* singled out" body that is an

[70] Gallagher and Zahavi (2012, p. 163).

[71] Gallagher and Zahavi (2012, p. 164).

[72] Gallagher and Zahavi (2012, p. 180).

[73] Husserl (1973, pp. 92–99).

[74] Husserl (1973, p. 93; italics in original).

[75] Husserl (1973, p. 93, note #1).

[76] Gallagher and Zahavi (2012, p. 44, 88, 179).

[77] Husserl (1973, p. 97; italics in original). The phenomenological realities constitute singular characteristics of the non-alien and include the following five characteristics of the non-alien: (1) field of sensation, (2) an 'I govern', (3) a repertoire of 'I cans', (4) a reflexive relationship between organs of sense and objects of sense, and (5) a consummately and uniquely singular psychophysical unity (ibid.). For a discussion and amplification of these characteristics of the non-alien from a genetic perspective, i.e., a tracing back to ontogenetical grounds, see Sheets-Johnstone (1999).

[78] Husserl (1973, p. 97; italics added).

animate organism, I do not *own* my movement: I move, and in moving, I feel a particular qualitative dynamics, whether a matter of walking, rushing, running, racing, or sauntering. Moreover the word *my* in the above sentence is no more than a descriptive lexical necessity, just as it is no more than a pronominal lexical necessity in answering a question posed to one about moving parts of one's body, as in "Yes, it is my arm that is moving."[79] Within the transcendental reduction, whether it is a question of turning a wheel or turning my head, I am alone in feeling the dynamics of the turning, feeling its abruptness or sustained character, its intensity, direction, and amplitude. I do not own such turnings any more than I own these hiccups or this sneeze, for example. The latter in fact happen to me. In their initial realities, so also do thoughts, pains, emotions, images, and so on. I may certainly say that I *have* any one of these animate happenings—these hiccups, thoughts, pains, images, and so on—but *my* having them is a declarative statement or judgment following on their already experienced living reality for me. They are indeed engendered in my being *an animate organism*, in particular and in fact, the uniquely singled out organism I am. Moreover with respect to thoughts, pains, emotions, and images, I may take any one of them up—pursue a thought, attend to a pain, espouse an emotion, dwell on an image—but to begin with, each simply arises. Further still, while to speak of "owning" movement—"I am the subject of this movement," as Gallagher and Zahavi put it—might possibly be a way of saying that I am taking responsibility for what I am doing, so might also be a declared "authoring" of movement. The latter too is a decidedly third-person observation, a way of reporting to a doctor, for instance, who is diagnosing my schizophrenic condition and questioning my sense of agency, that "I am initiating this action."[80] Finally, it is of phenomenological moment to point out that "involuntary action" does not come just from the outside as Gallagher and Zahavi seem to think, as in their examples of being pushed by someone and or being tapped on the knee with a mallet by a doctor.[81] It is not only these hiccups, this sneeze, or this cough, but these tears, this laugh, this smile, this spontaneous turning in interest toward something, this spontaneous throwing up of arms in exasperation, all of which are initially involuntary in the sense that they arise in bodily felt ways that we experience and that we take up—or not.[82] Any and all reactive tendencies that are immediate responses to the world about us are indeed initially involuntary in just this way.

5 Concluding observations

In sum, though we have bodies, they are containers of mind, emotions, a self, movement, and so on, only from a third-person, objective perspective, which is to say that phenomenologically, they embody nothing. Moreover, though we have bodies, neither as infants nor as adults do we own our bodies—or our minds for that

[79] See Gallagher and Zahavi (2012, pp. 179–180).

[80] Gallagher and Zahavi (2012, p. 180).

[81] Gallagher and Zahavi (2012, pp. 44, 179–180).

[82] See Johnstone (2012).

matter. While as indicated above, what Gallagher and Zahavi speak of as ownership might derive from what Husserl specifies within the phenomenological reduction to a "Sphere of Ownness"—from "fields of sensation" or "I govern," for example—"ownership" remains an adult, language-dependent concept enfolded in a reflective judgment outside immediate and direct experience, in particular, the kinesthetic experience of movement. As to agency, and as the classic twin experiment shows, the real-life, real-time reality of agency is rooted in the qualitatively dynamic experiences of the bodies we are, on kinesthesia and tactility, and on our innate receptivity and responsivity to our surrounding world. In short, it hinges on our being *animate organisms* whose repertoire of 'I cans' is born in movement and develops into synergies of meaningful movement. Embodied minds that know "whether my legs are crossed, or not," that know "where my right leg is and where my leg is," that know that they are being pushed and that "I am the subject of this movement," such minds cannot hold a candle to the likes of animate organisms, for all such minds are adult minds contained in either a static spatial container or a container unlived in the qualitative dynamic realities of life itself. Indeed, animate organisms do not just walk, but as pointed out above, experience their walk as rapid or slow, in haste or at leisure, and furthermore, as determined or hesitant, for example, and in a range of possibilities between any such oppositional pairings. While it is true that a disembodied mind would clearly not have a leg to stand on, much less walk, and that a so-called embodied mind clearly does have a leg to stand on and can walk, the latter is nevertheless—and just as clearly—a hindered specimen of Nature. Being saddled with an improper qualifier, it is a phenomenologically impoverished version of a veritable animate organism. Given its improper qualifier, an embodied mind is conceived basically as a ready-to-go cognitional system, ready-to-go because it is fully equipped with a physical go-cart that is complete with experience, action, language, self, movement, emotions, subjectivity, and so on. Whatever one cares to name as an ability, existential character, or personal reality, it is readily packaged in a seemingly limitlessly accepting receptacle known as "the body" that duly and without question embodies whatever one puts inside it.

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