



## E-offprint

# Possibilities of Embodiment

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# Embodied Education: A Convergence of Phenomenological Pedagogy and Embodiment

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**Abstract:** In this article we argue for the necessity of a new double alliance between phenomenology and cognitive sciences (through embodied theory) on the one hand, and between phenomenological pedagogy and the embodiment paradigm on the other. We strongly believe that phenomenological pedagogy should enter into dialogue with the cognitive sciences movement called “Embodiment” in order to renew its educational theories and practices. Indeed, the new suggestions about the mind that come from the embodiment paradigm can already have a huge impact on learning and education, but a relatively structured “pedagogy of consciousness” is still missing. This topic will be discussed with a special focus on body and embodied consciousness, which nicely brings together these different traditions. Finally, an actual example of how the embodiment paradigm and phenomenological pedagogy can converge will be presented through the practice of meditative experience.

**Keywords:** Phenomenology, Pedagogy, Cognitive science, Embodiment, Mindfulness.

## *1. Introduction*

Phenomenological pedagogy has had a long and important tradition within the history of education and the social sciences in general. This tradition goes back especially to Merleau-Ponty and his works on psychology, pedagogy, and human development, and it has been later developed by many international scholars related to the phenomenological educational movement, such

as, among others, Max Van Manen,<sup>1</sup> in North America, and Piero Bertolini,<sup>2</sup> who has played a fundamental role in the dissemination of the phenomenological movement in Italy and who is the founder of the Italian tradition of phenomenological pedagogy.

However, in the last two decades, phenomenological educators seem not to have noticed, or to have paid much attention to, a further development within phenomenology: namely, the promising encounter of phenomenology and cognitive sciences, which has produced the so-called “Embodied Theory” or “Embodied Cognition” approach, generally defined as “Embodiment.” As we will show in this paper, this epistemological and empirical movement has greatly increased within different disciplines—psychology, philosophy of mind, anthropology, sociology, neuroscience, cognitive sciences—and today it appears to be one of the most promising and influential approaches in education as well. Some of the pillars of the embodiment paradigm that correspond—in spite of the classical cognitivism—to key concepts in education are the role of subjective experience (first-person perspective), the body (embodied cognition), the environment (embedded cognition), and the situation/experience (situated cognition) in the constitution of the “life of the mind.”

This crucial paradigm shift within cognitive and social sciences does not seem to be taken in consideration yet by phenomenological pedagogy as an opportunity to renew and extend educational theory and practice. This may be attributed to the fact that some phenomenological educators are not receptive to interesting and stimulating changes and unexpected evolution in contemporary phenomenology. Our intent in this paper is (1) to provide a general and brief description of “Embodied Cognition” as it has evolved; (2) to discuss the problems of consciousness and of the phenomenological mind from the pedagogical point of view; and (3) to discuss the “educational question” about embodiment, the body-mind problem, and bodily consciousness.

We aim to analyze how embodiment can relate to phenomenological pedagogy in a common effort toward a brand new approach to education, an education that, although close to and in permanent dialogue with cognitive sciences, is more interested in the “learning consciousness” than in the “learning brain.” Indeed, in contrast to so-called “neuroeducation,”<sup>3</sup> which is usually exclusively focused on brain-based curricula and teaching and the development of functional skills, an “embodied education” aims to work on the self and the identity of people, that is, on the way in which people shape their

<sup>1</sup> M. Van Manen, *Researching lived experience. Human science for an action sensitive pedagogy*, Ontario: SUNY Press, 1990.

<sup>2</sup> P. Bertolini, *Fenomenologia e pedagogia*, Bologna: Malipiero, 1958; Id., *Lesistere pedagogico. Ragioni e limiti di una pedagogia come scienza fenomenologicamente fondata*, Firenze: La Nuova Italia, 1988; *Pedagogia fenomenologica. Genesi, sviluppo, orizzonti*, Firenze: La Nuova Italia, 2001.

<sup>3</sup> K. W. Fischer, “Mind, Brain, and Education: Building a scientific groundwork for learning and teaching,” *Mind, Brain, and Education*, 3.1 (2009), pp. 2–15.

presence in the *Lebenswelt*. Merleau-Ponty has demonstrated how the body plays a fundamental role in the constitution of cognition and self, thus laying the foundation for the current cognitive sciences. We think that current phenomenological pedagogy should more fully take his legacy into consideration, building upon his effort to open phenomenology to a thoughtful encounter with pedagogy, developmental psychology, and “hard sciences” in order to face the challenge that cognitive sciences and neurosciences offer to education and phenomenology today. The entire Embodied Cognition movement owes much to Merleau-Ponty, and nowadays, thanks to him, we can propose an original perspective about the mind and cognition, a perspective that has its focus on human experience and that can deeply influence pedagogical theories and practices, giving them a new direction.<sup>4</sup>

Finally, an actual example of how the embodiment paradigm and phenomenological pedagogy can converge will be presented. In particular, we will discuss how the body and bodily experience can be employed in educational settings through meditative experiences for the development of self-presence and awareness.

## 2. *The Theoretical Framework: Phenomenology and Embodied Theory*

The beginning was an encounter between two different disciplines and schools of thought, as different as chalk and cheese: phenomenology and the cognitive sciences. Their vast difference is probably the reason for this definitely successful encounter, which happened twenty years ago and is still increasing.

In particular, the area of so-called “Embodied Cognition” is at the intersection of different fields and different theoretical traditions, namely, phenomenology, cognitive sciences, and dynamic systems theory; interestingly, meditation has been the initiator and mediating field of this encounter.<sup>5</sup> As is well known, in this area many different disciplines have had a role and a function—to name a few, psychology, philosophy, computer science, and neuroscience—but educational sciences have been excluded, whether intentionally or not. Except for a few authors and scholars,<sup>6</sup> the role of education within cognitive sciences has been relegated to exploring mechanisms that underlie learning and cognition, rather than working to create a global, structured, and stable theory of education.<sup>7</sup> And even less work has been done so far toward

<sup>4</sup> S. Gallagher and D. Francesconi, “Teaching Phenomenology to Qualitative Researchers, Cognitive Scientist, Phenomenologists,” in *Indo-Pacific Journal of Phenomenology*, in press.

<sup>5</sup> F. J. Varela, E. Thompson and E. Rosch, *The Embodied Mind. Cognitive Science and Human Experience*, Cambridge (MA): MIT Press, 1991.

<sup>6</sup> M. Dallari, *Isaperi e l'identità. Costruzione delle conoscenze e della conoscenza di sé*. Milano: Guerini, 2000; F. Santoianni, *Educabilità cognitiva*, Firenze: Carrocci, 2006.

<sup>7</sup> D. Ausubel, J. Noak, and H. Hanesian, *Educational Psychology: A Cognitive View*, New York: Holt, Rinehart & Winston, 1978.

a marriage that we think cannot be postponed any longer, the marriage between phenomenological pedagogy and the embodiment paradigm. Later in this article we will focus on this possible alliance, both from a theoretical and a practical side. Indeed, we will argue that today this alliance represents a new possible path not only for phenomenology in general, where embodied theory has been widely received in the dialogue between philosophy and cognitive science,<sup>8</sup> but also for phenomenological pedagogy.

So, where does this connection come from? And what is it based on? According to Gallagher and Zahavi, the best example to explain the close connection (closer than has been thought) between phenomenology and cognitive sciences is the “case” of Merleau-Ponty.<sup>9</sup> It could seem a paradox, but nowadays Merleau-Ponty—better known as a phenomenological philosopher—is often considered one of the co-founders of the cognitive sciences<sup>10</sup> thanks to his outstanding work on perception, self, and body. Merleau-Ponty was not only one of the leaders of the phenomenological movement of his time—straddling the middle of the 20th century—but he was also extremely interested and qualified for psychology, education, and the neuroscientific results of that time. Starting from these interests, he fully addressed the topic of the body within pedagogy and psychology. Reading, for example, *Phenomenology of Perception*, you immediately notice how his attitude always oscillates between philosophical discussion and scientific and experimental data from the knowledge available at his time, as is commonly done today in philosophy of mind and cognitive sciences. A good example, among others, is how he deeply investigated and discussed the issue of the *phantom limb*, a topic of considerable importance in modern cognitive neuroscience. The contemporary debate on the role of the body in the constitution of cognition, lived experience, and perception is a much heated debate in current cognitive science, but during the 20th century Merleau-Ponty was one of the few to develop a deep and structured analysis of these topics, and his work is still a cornerstone for many other scholars of our time.

It is known that at the end of the last century, the work of Merleau-Ponty and other phenomenologists was effectively brought into the cognitive sciences field mainly by one book, namely, *The Embodied Mind: Cognitive Science and Human Experience*, by Francisco Varela, Evan Thompson, and Eleanor

<sup>8</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind: An Introduction to Philosophy of Mind and Cognitive Science*, London: Routledge, 2008; S. Gallagher and D. Schmicking (eds.), *Handbook of Phenomenology and Cognitive Science*, Dordrecht: Springer, 2009.

<sup>9</sup> M. Merleau-Ponty, *Phenomenology of Perception*, Engl. transl. by C. Smith, London, Routledge, 2002.

<sup>10</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*; Gallagher and Schmicking, *Handbook of Phenomenology and Cognitive Science*, *op. cit.*; V. Gallese, “Corpo vivo, simulazione incarnate e intersoggettività. Una prospettiva neuro-fenomenologica”, in M. Cappuccio (ed.), *Neurofenomenologia. Le scienze della mente e la sfida dell’esperienza cosciente*, Milano: Bruno Mondadori, 2006, pp. 293–327; J. L. Petit, “La spazialità originaria del corpo proprio. Fenomenologia e neuroscienze,” in M. Cappuccio (ed.), *Neurofenomenologia*, *op. cit.*, pp. 163–194.

Rosch. That book marked a boundary between the old and new paradigm for the cognitive sciences, a boundary that nowadays is clearly visible. The main revolution caused by that book has been, as indicated, the connection between phenomenology, Eastern thought (especially Buddhism), and modern cognitive neuroscience, a connection devoted to creating a new way to think of the mind as an “embodied mind,” grounded in lived experience. Today, twenty years after the book’s release, the forerunner work of the early phenomenologists is also often considered to be of critical importance for its huge impact in educational experience with regard to many themes,<sup>11</sup> including consciousness, subjectivity and subjective experience, intersubjectivity, sociality and social cognition, intentionality, perception, body/embodiment, time, and research methodologies, with special regard to qualitative methods.

The *embodied* approach, unlike the classic cognitivist approach that initially came from cybernetics and, later, from informatics and the computational approach, deeply re-evaluates the role that subjective experience plays in the construction and expression of cognition and knowledge; it accordingly recalibrates everything, even the research interests and methodologies useful to investigate the so-called *embodied mind*, the mind that is ontologically expressed by the connection with the body and the environment, the mind that has an ontological first-person dimension. This approach—which has a few ancestors in some works that appeared in the late 1970s by such scholars as Humberto Maturana, together with Varela<sup>12</sup> and Hubert Dreyfus<sup>13</sup>—has grown considerably in recent years within the scientific literature, and has produced several currents of thought: embodied cognition or embodiment,<sup>14</sup> grounded cognition,<sup>15</sup> radical embodiment,<sup>16</sup> enactivism,<sup>17</sup> situated and embedded cognition,<sup>18</sup> extended mind,<sup>19</sup> naturalized phenomenology,<sup>20</sup> and neurophenomenology.<sup>21</sup>

<sup>11</sup> E. Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, Harvard University Press, 2007, p. 20.

<sup>12</sup> H. R. Maturana and F. J. Varela, *Autopoiesis and Cognition. The Realization of the Living*, Dordrecht: Kluwer, 1980.

<sup>13</sup> H. Dreyfus, *What Computers Can't Do*, Cambridge (MA): MIT Press, 1972.

<sup>14</sup> F. Varela, E. Thompson and E. Rosch, *The Embodied Mind*, *op. cit.*

<sup>15</sup> D. Pecher, and R. A. Zwaan, *Grounding Cognition: The Role of Perception and Action in Memory, Language, and Thinking*, Cambridge (UK): Cambridge University Press, 2010.

<sup>16</sup> A. Chemero, *Radical Embodied Cognitive Science*, Cambridge (MA): MIT Press, 2009.

<sup>17</sup> J. Stuart, O. Gapenne, E. Di Paolo, *Enaction: toward a new paradigm for cognitive science*, Cambridge (MA): MIT Press, 2010.

<sup>18</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*

<sup>19</sup> A. Clark, *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*, New York: Oxford University Press, 2011.

<sup>20</sup> J. Petitot, F. J. Varela, B. Pachoud, J. M. Roy, *Naturalizing phenomenology: Issues in contemporary phenomenology and cognitive science*, Stanford (CA): Stanford University Press, 1999.

<sup>21</sup> A. Lutz, “Toward a neurophenomenology as an account of generative passages: A first empirical case study,” *Phenomenology and the Cognitive Sciences*, 1.2 (2002), pp. 133–167;

According to Gallagher and Zahavi, we can likely say that everything began with the so-called “hard problem”, that is the problem of the phenomenological mind.<sup>22</sup> Cognitive scientists decided to face it, after years of avoiding it, when Varela and his colleagues clearly pointed out that a paradigm shift was necessary, and it would have been necessary to move from the behavioral and computational conception of the mind to an “ecological” one, a paradigm able to consider the central question for the science of the mind, the question of “Who”, the problem of the subject and of the subjective perception of the world. The question was condensed in the term “experience”, which takes together the subject/object relationship in an ongoing, real, live modality, and which offers a completely different perspective on the mind and the way to study it.

Nowadays the embodied approach is affirmed—and even fashionable—but still so much has to be done for a concrete paradigm shift, especially in the educational sciences, with regard to the role of the body and experience in the constitution of cognition and identity.

### 3. *The Phenomenological and Embodied Mind*

There is a recent growing interest in the body both from the philosophical and cognitive sciences approaches. Embodied, embedded, enacted mind are different ways to define a common thesis: following Merleau-Ponty’s intuitions back in the 1950s, mental activity depends not only on the brain, but also on the body. However, the body has many dimensions: experiential, psychological, functional, biological, intersubjective.<sup>23</sup> Taken in its plural definition, the embodied mind notion avoids the old intractable problems inherent in the computationalist approaches of 20th century atomism and radical empiricism. On the contrary, according to Merleau-Ponty’s idea of embodiment, the body is both a lived experience structure and a context for cognitive mechanisms.

From the embodied perspective, following Merleau-Ponty, cognition is not considered as the result of a series of cerebral functions that somehow and somewhere interface with the body of the thinking subject. Instead, it has to be better seen as the result of the constant and structural interface activity between the body and the environment, the result of the sensorimotor

A. Lutz and E. Thompson, “Neurophenomenology Integrating Subjective Experience and Brain Dynamics in the Neuroscience of Consciousness,” *Journal of Consciousness Studies*, 10.9–10 (2003), pp. 31–52; J. F. Varela, “Neurophenomenology: a Methodological Remedy to the Hard Problem,” *Journal of Consciousness Studies*, 3.4 (1996), pp. 330–350.

<sup>22</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, pp. 107–108. R. Jackendoff, *Consciousness and the Computational Mind*, Boston: MIT Press, 1990; F. Varela, “Neurophenomenology,” *op. cit.*

<sup>23</sup> D. Legrand, T. Grünbaum, and J. Krueger (eds.), “Dimensions of Bodily Subjectivity,” special issue of *Phenomenology and the Cognitive Sciences*, 8.3 (2009), pp. 279–408.

information that creates the background from which the mind can emerge and the horizon to which the mind can attend.<sup>24</sup> The body constitutes cognition itself, it generates it, and it is its phylogenetic and ontological matrix. The somatosensory and motor apparatus can no longer be considered as mere servants of the noblest neocortex, performers more or less diligent of skillful commands coming from the queen of higher cognitive functions; they rather seem to share the basic function of constructing the knowledge of reality that we constantly put in place (*enact*).<sup>25</sup> Here there is the sense, not only ironic, therefore, of saying that the human being is “out of the head”:<sup>26</sup> cognition—as well as meta-cognition, consciousness, self, mind, or any other name we want to give to self-presence—emerges both evolutionarily and biographically from the relationship of the mental and bodily aspects of human nature, creating, along with the environment, *lived experience*.<sup>27</sup> therefore, embodied cognition indicates that the pure cognition that would be something like a *view from nowhere*<sup>28</sup> does not exist (or we have not found it yet), because thought is always related to, and dependent upon, the whole subject and his/her entire biography. The space-time dimensions literally shape the mind:<sup>29</sup> thought does not merely relate to the body as an object of the outside world, but is made from it,<sup>30</sup> it does not stem solely from interactions in the brain, which is a specific organ, but also from those in the person, that is, the organism.

So, the problem of the mind recalls the question of consciousness, which is a topic at the core of phenomenology; indeed, it is possible to refer to phenomenology as the *science of consciousness*. The etymology of the word “consciousness” indicates self-awareness, or interior knowledge of what is going on inside me and to me at a specific moment in a specific place. And consciousness is the origin and the core of the so-called “hard problem”; while this problem has to do with the essence of the phenomenological mind, Chalmers<sup>31</sup> characterized the neuroscientific analysis of cognitive functions (low or high level) such as language, memory, learning, motor control, sight, etc., as “easy problems” because they are clearly physiological events, not simple, but reducible to a range of a few variables bound to each other by a causal-effect logic and, thus, sooner or later explicable. In this case, the researchers create and face questions such as: which and where are the cerebral circuits assigned

<sup>24</sup> M. Merleau-Ponty, *Phenomenology of Perception*, *op. cit.*

<sup>25</sup> V. Gallese, *Corpo vivo, simulazione incarnate e intersoggettività*, *op. cit.*, p. 302.

<sup>26</sup> A. Noe, *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness*, New York: Straus and Giroux, 2010.

<sup>27</sup> S. Gallagher, *How the Body Shapes the Mind*, Oxford: Clarendon Press, 2005.

<sup>28</sup> T. Nagel, *The View From Nowhere*, Oxford: Oxford University Press, 1989.

<sup>29</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, pp. 69–85.

<sup>30</sup> M. Merleau-Ponty, *Phenomenology of perception*, *op. cit.*

<sup>31</sup> D. Chalmers, “Facing up to the problem of consciousness,” *Journal of Consciousness Studies*, 2.3 (1995), pp. 200–219; Id., “Moving forward on the problem of consciousness,” *Journal of Consciousness Studies*, 4.1 (1997), pp. 3–46.



to a specific cognitive function? Which specific cerebral areas get activated by a specific stimulus?

The “hard problem”<sup>32</sup> emerges instead when we switch our interest from the analysis of operational functions of a physiological nature to the analysis of the phenomenological experience of these functions, which are of a subjective nature, that is, the way in which a subject perceives him/herself in the *Lebenswelt*,<sup>33</sup> in the real world, through his/her consciousness. Obviously consciousness can also be reduced to an easy problem, within the causal-effect paradigm, because consciousness too derives from a biological substrate (which is not the brain, but the brain-body-environment dynamic unit). In this case we speak of NCC (Neuronal Correlates of Consciousness).<sup>34</sup> But at the same time consciousness has a subjective, qualitative, and more complex nature based on the fact that only the subject can experience it. In this case we speak of phenomenological mind, consciousness, or *first-person perspective*.<sup>35</sup> I can communicate and share my interior states, but others do not have direct, immediate, and natural access to it. The “first-person” dimension of reality challenges the researcher<sup>36</sup> and the practitioner to investigate the subject while perceiving and describing him/herself and his/her own cognitive activity.<sup>37</sup> In this case the research and practical questions are: what are the subjective dimensions of speaking, hearing, remembering, moving, seeing? How do subjects perceive that? How do they describe that?

These questions about the nature of the phenomenological mind lead to some pedagogical issues that are particularly interesting for educational psychologists.<sup>38</sup> Can we educate consciousness? Can we improve people’s ability to be aware, refining object perception and description? Can we speak of consciousness as something that can learn to read reality? What understanding does the subject have of him/herself doing an action? That is to say, when can we speak about *someone* implicated in the perception of something?

<sup>32</sup> F. Varela, *Neurophenomenology*, *op. cit.*, p. 331.

<sup>33</sup> M. Merleau-Ponty, *Phenomenology of perception*, *op. cit.*

<sup>34</sup> E. Thompson and F. J. Varela, “Radical embodiment: Neural dynamics and consciousness,” *Trends in Cognitive Science*, 5.10 (2001), pp. 418-425.

<sup>35</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, p. 40.

<sup>36</sup> W. M. Roth, “Cognitive Phenomenology: Marriage of Phenomenology and Cognitive Science,” in *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 5.3 (2004), Art. 12, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0403129>; D. Francesconi and M. Tarozzi, “Giving voice to the bodily experience. A phenomenological method in researching meditative experience”, unpublished paper presented at the *International Human Science Research Conference*, Seattle, 2010.

<sup>37</sup> J. Shear, and F. J. Varela, “First-person Methodologies: Why, When and How,” *Journal of Consciousness Studies*, Vol. 6.2–3 (1999), pp. 1–14; Id., (eds), *The View from Within: First-Person Approaches to the Study of Consciousness*, London: Imprint Academic, 1999.

<sup>38</sup> W.M. Roth, *Cognitive Phenomenology*, *op. cit.*

#### 4 Bodily Consciousness and the Pedagogical Question

##### 4.1 The Learning Consciousness

According to some well-known theorists of mind, individual consciousness is considered completely useless and not credible,<sup>39</sup> something that even prevents action planning, control, and execution. From a phenomenological point of view, instead, consciousness is the core of the mind and life, because it gives the sense of what is going on and works as a meaning creator, with or without a role in the decision-making process. Any experience depends on at least minimal forms of self-consciousness that allow us to consider the experience as *my* experience, within the time-space flow of experience:

Experience happens for the experiencing subject in an immediate way and as part of this immediacy, it is implicitly marked as my experience. For the phenomenologists, this immediate and first-personal givenness of experiential phenomena must be accounted for in terms of a “pre-reflective” self-consciousness. By calling the type of self-consciousness in question “pre-reflective”, we wish to emphasize that it does not involve an additional second-order mental state that in some way is directed in an explicit manner towards the experience in question. Rather, the self-consciousness must be understood as an intrinsic feature of the primary experience. [...] I can, of course, reflect on and attend to my experience, I can make it the theme or object of my attention, but prior to reflecting on it, I wasn’t “mind- or self-blind”. The experience was already present to me, it was already something for me, and in that sense it counts as being pre-reflectively conscious.<sup>40</sup>

Gallagher and Zahavi<sup>41</sup> introduce the difference between pre-reflective self-consciousness and reflective self-consciousness. The latter lies on the first as a bird, flying, lies on the air; you do not see the air, but it is right there, and it constitutes the background on which every movement can be done. Pre-reflective self-consciousness is then the background on which every consciousness of something can appear to the subject; even without any reflection on my own mental activity, being conscious of something is always being conscious of someone.<sup>42</sup> The idea is that we are already into the experience prior to our own conscious awareness: “The notion of pre-reflective self-consciousness is related

<sup>39</sup> T. Metzinger, *Being No One: The Self-Model Theory of Subjectivity*, Cambridge: MIT Press, 2004.

<sup>40</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, p. 46.

<sup>41</sup> S. Gallagher and D. Zahavi, “Phenomenological approaches to self-consciousness,” in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Spring Edition), 2005; Id., *The Phenomenological Mind*, *op. cit.*

<sup>42</sup> S. Gallagher and D. Zahavi, “Phenomenological approaches to self-consciousness,” *op. cit.*; Id., *The Phenomenological Mind*, *op. cit.*, p. 50.

to the idea that experiences have a subjective 'feel' to them, a certain (phenomenal) quality of 'what it is like' or what it 'feels' like to have them, without the need to reflect on it."<sup>43</sup> We are always already there, before we are able to conceptualize our conscious presence. Experience always has a certain way of manifesting itself, and this certain way is certain for someone. In phenomenology, every experience requires a subject; there is a sort of self-referentiality, of *for-me-ness*.<sup>44</sup> So, every kind of experience is characterized by a form of *mineness* (*Meinheit*) that makes the experience one of meaning something for somebody.

This is the first-personal givenness of phenomenal experience, and it can be split into two different modalities: the *weak and the strong first-person perspective*. The first is related to having or embodying this perspective as the subjective manifestation of one's own experiential life; the second has to do with the linguistic ability to refer and articulate the experience.<sup>45</sup> We believe that the two modalities of the first-person perspective are closely related, especially from an educational point of view. Pre-reflective self-consciousness does not amount to first-person knowledge; it is a necessary but not sufficient condition. We argue that the *mineness*, the subjective dimension of the phenomenal experience, should be at the core of the educational processes. Both pre-reflective self-consciousness and self-reflective consciousness, even though in different ways, can be the goal of a phenomenological educational practice aimed at the so-called "learning consciousness," that is, the dynamic "I-object" relationship, the "noesis-noema" couple, the ability to develop a certain way to stay in contact with reality, to perceive the world and make it meaningful. Except for the pioneering approach of Piero Bertolini to "reconstruct" the worldview of young offenders,<sup>46</sup> pedagogical work on consciousness is far from being done in the schools or other educational contexts. And when it is practiced (not so broadly) it is usually reduced to as so-called "reflective thinking,"<sup>47</sup> which is a valuable educational practice to educate the subjective dimension, but the reflective dimension does not exhaust the theme of consciousness in education. However, it seems to us that the ability of the subject to develop the subjective dimension of perception, to create meaning about his/her experience, and to be phenomenologically affected by reality have to be further investigated by educational theory or inquiry.<sup>48</sup> According to Husserl,

<sup>43</sup> *Ibid.*, p. 49.

<sup>44</sup> *Ibid.*, p. 50.

<sup>45</sup> *Ibid.*, p. 47.

<sup>46</sup> P. Bertolini, *Per una pedagogia del ragazzo difficile*, Bologna: Malipiero, 1965; P. Bertolini and L. Caronia, *Ragazzi difficili. Pedagogia interpretativa e linee di intervento*, Firenze: La Nuova Italia, 1993.

<sup>47</sup> D. Demetrio, *L'educazione interiore. Introduzione alla pedagogia introspettiva*, Firenze: La Nuova Italia, 2000; L. Mortari, *Aver cura della vita della mente*, Milano: La Nuova Italia, 2002, pp. 146-153.

<sup>48</sup> M. Tarozzi and L. Mortari (eds.), *Phenomenology and Human Science Research Today*, Bucharest: Zeta Books, 2010.

the transcendental reduction, which attempts to reach consciousness in the most authentic sense, is an educational journey in itself, even if it can never be completely fulfilled.<sup>49</sup>

Education for “becoming aware,” meant to “educate” consciousness, is a practice not (usually) done at school, but we noticed that the proposal made by informal schools and courses attracts more and more adults, as if educational settings for the development of awareness were deeply intriguing for adult people. In particular, meditation practice seems to fit the request to deepen the ability of being self-aware and to develop the intentionality of our consciousness, since this ability is closely related to the conduct, interpretation, and comprehension of ordinary, normal everyday life. What people learn during meditative courses, for instance, is nothing miraculous, but something very concrete and pragmatic, that is, the way to stay in the *Lebenswelt*; people usually learn to look at the world in a different way, to perceive differently, to improve their intentional skills, changing their gaze, and so switching from experience to *lived experience*, where the subject is fully present and can better appreciate what is going on. Indeed, a trained mind realizes that being present to the world and to itself means being present to the *present moment*, with great awareness of the temporal dimension of the life of the mind. This does not imply the necessity of avoiding the metacognitive or narrative attitude;<sup>50</sup> on the contrary, metacognition is a strategic cognitive activity necessary to recollect the events in a meaningful order, taking a break from the current direct connection to the material world and re-creating the sense it makes for experience.<sup>51</sup> What we mean is that metacognition cannot substitute for awareness, but awareness must be considered as its necessary support. We mean that it is necessary to be aware, present, and mindful in everything one is doing, saying, thinking, or reflecting: being there, where we are.

The way in which the mind reacts to the world, with all its specific stimuli, is not only a fact of perception, but also a fact of how perception and reception are developed. All kinds of bodily—and mental—experiences and the ways in which subjects learn to control themselves and their minds are very interesting topics for the cognitive and educational sciences. It is a learning process that needs to be studied, both from phenomenological and educational perspectives.

Being aware, as well as other cognitive functions such as writing, reading, speaking, calculating, and so on, can be learned and can be improved. This is what we mean when it comes to *learning consciousness*. Learning consciousness is the consciousness that learns to be in contact with reality, that is, to be able to stay in the flow of experience without losing the ability to understand what

<sup>49</sup> P. Bertolini, *L'esistere pedagogico*, *op. cit.*, pp. 58–60.

<sup>50</sup> M. Tarozzi, “Il paradigma dell’agire narrativo nel buddhismo mahayana,” *Quaderni di Adulità*, 3 (2002), pp. 49–61.

<sup>51</sup> M. Dallari, *La dimensione estetica della paideia. Fenomenologia, arte, narratività*, Trento, Erickson, pp. 191–201.

is happening there on a broader level. This is an attitude that can be improved through the phenomenological method and through specific bodily experiences, for instance, as said, meditation.

Following Thompson's suggestion about the division between *static* and *genetic* phenomenology, we consider genetic phenomenology from a pedagogical point of view<sup>52</sup> definitely as the best option, if compared to static phenomenology, for describing and expressing the learning consciousness, that is, the possibility of developing, changing, and improving the way in which consciousness tends toward the object. Indeed,

static phenomenology analyzes the formal structures of consciousness, whereby consciousness is able to constitute (disclose or bring to awareness) its object. Static phenomenology takes these intentional structures and their correlative objects as given and analyzes them statically or synchronically. Genetic phenomenology is concerned with how these intentional structures and objects emerge through time; there, it cannot take them as given. Instead, it analyzes how certain types of experience motivate later and more complex types—for example, how implicit and prereflective experiences motivate attentive and reflective experiences. From the perspective of genetic phenomenology, experience has a sedimented structure, and the process of sedimentation needs to be understood in relation to the lived body and time-consciousness.<sup>53</sup>

#### 4.2. Bodily Consciousness

According to a well-established phenomenological tradition that considers that subjects do not *have* a body but *are* a body, the embodied approach makes clear that in the mind-body relationship, the body not only precedes the mind for stimuli reaction, but is also active in the interpretation and comprehension of reality.<sup>54</sup> That is why and how we can better talk about the fact that we *do* a body and we have/create a *kinaesthetic consciousness*.<sup>55</sup> In fact, we must speak of the discovery of the *sensorimotor* and *somatosensitive systems*, given that in the past, the sensitive system and the motor system were considered as separate; now, however, we know better that perception and action are so strictly coupled that we have to speak of the birth of the *sensorimotor paradigm*.<sup>56</sup> The ability to understand reality, including the social world, seems to have a pragmatic and prelinguistic nature more than a semantic one.<sup>57</sup> So, if consciousness is the awareness of what is happening in a given place in a given moment,

<sup>52</sup> E. Thompson, *Mind in Life*, *op. cit.*, p. 29.

<sup>53</sup> *Ibid.*, p. 30.

<sup>54</sup> V. Gallese, *Corpo vivo*, *op. cit.*

<sup>55</sup> E. A. Behnke, "Ghost Gestures: Phenomenological Investigations of Bodily Micromovements and Their Intercorporeal Implications," *Human Studies*, 20.2 (1997), p. 198.

<sup>56</sup> V. Gallese, *Corpo vivo*, *op. cit.*, pp. 307–308.

<sup>57</sup> *Ibid.*, pp. 313–314.

what are we precisely aware of? The first object of our perception is our body; the body is what consciousness most fundamentally takes into account.<sup>58</sup> Even when we do not deliberately pay attention to kinetic sensations—and that happens most of the time—the sensorimotor system creates what Damasio call the *proto-self*,<sup>59</sup> which is comparable with what we said before about pre-reflective self-consciousness. The body gives us the awareness of being the person we are, the same person of the day before, in a certain environment in a certain moment. The body creates the “I-self continuum” that allows us to have the sense of mineness without thinking or reflecting, to be aware of ourselves without any iconic or linguistic representation. Paraphrasing Heidegger, who used to say that the language is the house of being, from an embodied perspective we should now say that the body is the house of being.

The recent discovery of the so-called *mirror-neuron system* has clarified how the body fully contributes to the understanding of actions executed by others, and even of their meanings; the mirror system works both when a person acts and when he/she sees someone else acting.<sup>60</sup> The most important result here seems to be the fact that we are—evolutionary—predisposed to recognize what another person is doing. The same can be said about objects: seeing an object means to evoke automatically what we will or may do with that object, it means to be already ready for a potential action, already tuned in with the surroundings, both material and social. In this way, the world becomes a lived world where the body is always the first translator from reality to meaning. Indeed, objects, persons, and situations are not only identified, differentiated, and categorized through their physical appearances, but also with regard to their potential interaction with an agent.<sup>61</sup> So, the role of the body appears to be to clarify and translate the interaction with the external world, where the most important element here is neither the external world nor the body, but the relationship between them. Within the dynamic process called action—or potential action—the agent can find his/her own way to act only through a bodily alphabet already constituted by the body itself, an alphabet that is pre-conceptual and pre-linguistic and that relies on the lived experience of the body. This bodily alphabet is also the basis for further experiences and the ground for bodily consciousness. To take control of our body and to be aware of it requires learning how our body shapes not only the mind, but also our social interaction and life. Being aware of the bodily dimension of our identity and of the bodily dimension of our interaction with the world means to be able to recognize, appreciate, and control, when necessary, the emotions, sensations, and meanings that emerge from them: phenomenologically speaking,

<sup>58</sup> J. L. Petit, *La spazialità originaria del corpo proprio*, *op. cit.*

<sup>59</sup> A. R. Damasio, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*, 2000, Houghton Mifflin Harcourt, p. 285.

<sup>60</sup> V. Gallese, *Corpo vivo*, *op. cit.*, pp. 300–305.

<sup>61</sup> *Ibid.*, p. 301.

a bodily consciousness is that consciousness that knows how to give significance to a pre-linguistic I-world interaction through the empathic attitude.<sup>62</sup> Perceiving others means perceiving me-in-the-act-of-perceiving-others, not in a mentalistic effort, but through the body we are and the actions we do. This is the first step for empathy, that is, perceiving others as we perceive ourselves, feeling others as we feel ourselves, not because of a confusion about my and his/her identity, but because the body—and the experiences I have already lived—helps me to recognize what the other person is living; so, empathy, derives from the lived body (*Leib*) rather than from the physical body (*Körper*), and the higher level of the lived body necessarily involves the consciousness not only of what is going on in a specific action, but also, and primarily, its meaning: “[...] in empathy we experience the other directly as a person, as an intentional being whose bodily gestures and actions are expressive of his or her experiences or states of mind.”<sup>63</sup>

## 5. Phenomenological Pedagogy and the Body

### 5.1. The Phenomenological Concept of Learning

Looking more deeply at the phenomenological analysis of bodily consciousness, we find important theoretical and philosophical references<sup>64</sup> to Husserl's work and, especially, to the work of Merleau-Ponty, whose distinction between *Körper* (the body as object) and *Leib* (the lived body) is a sort of cornerstone.<sup>65</sup> This general distinction leads to a theoretical distinction with interesting repercussions in educational practice, a distinction between the body as an instrument, a machine that can be used in functional and instrumental ways in sports, performance, and communication, and the lived body as the expression of the individual's identity. For example, in educational practice there is a difference between motor skills education and physical education on the one hand and body education on the other,<sup>66</sup> where the former

<sup>62</sup> *Ibid.*, p. 317.

<sup>63</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, p. 183.

<sup>64</sup> See M. Merleau-Ponty, *Phenomenology of Perception*, *op. cit.*, part I, ch. 4, but cf. also Husserl's distinction between physical body (*Körper*) and subject-body (*Leib*), the lived and intentional body in the 5th *Cartesian Meditation*. See E. Husserl, *Cartesian Meditations*, English trans. by D. Cairns, The Hague: Martinus Nijhoff, 1960. See also V. Iori, *Nei sentieri dell'esistere: Spazio, tempo, corpo nei processi formativi*, Trento: Erickson, 2006; U. Galimberti, *Il corpo. Antropologia, psicoanalisi, fenomenologia*, Milano: Feltrinelli, 2002.

<sup>65</sup> S. Gallagher, *How the Body Shapes the Mind*, *op. cit.*; Merleau-Ponty, *Phenomenology of Perception*, *op. cit.*

<sup>66</sup> P. Calidoni, A. Cunti, L. De Anna, P. De Mennato, I. Gamelli and M. Tarozzi, *Pedagogia ed educazione motoria*, Milano: Guerini, 2002; R. Farnè (ed.), *Sport e formazione*, Milano: Guerini Associati, 2008.

are more attentive to the development of motor skills and applicative goals (*Körper*) while the latter points directly to the development of body identity (*Leib*).

Following Husserl, Piero Bertolini argues that the body is the primary place for the “passive genesis” of subjectivity. Becoming a person requires young people—Bertolini refers particularly to adolescents—to deal with some constraints, and the body is the first of them: it circumscribes the boundaries of our world-view, it is the gate to intersubjectivity, and adolescents are constantly in balance between living the body and representing it. Educators can support these students in becoming aware of the constraints of their body and overcoming these constraints by integrating them into a more stable body image.<sup>67</sup>

The lived body is strictly connected to the way in which the subject can operate in the world through practical knowledge and *habits*, which are flexible and situationally attuned tendencies toward actions that are performed without explicit thoughts and deliberate reflection prior to action. It is through our habits that we usually interact with the world, and habits are what our body has learned from the interaction of experience with the world.<sup>68</sup>

Øyvind Standal<sup>69</sup> has pointed out that Hubert Dreyfus<sup>70</sup> definitively prefers the notions of ‘skill’ and ‘skillful coping’ rather than ‘habit’, since the concept of habit derives from behaviorism; according to Dreyfus, the connotation of *habit* is a “rigid behavior,” that is, exactly what Merleau-Ponty distinguished from the flexible and situation-sensitive skills that constitute his concept of *habitude*. “*L’habitude*” is the word originally used in the French text of *Phenomenology of Perception*, which has been translated as “habit” in the English edition. But Dreyfus indicates that the notion of “habit” is so infused with unwanted connotations that its use destroys the intended meaning of *l’habitude*. However, both Merleau-Ponty and Dreyfus use “habits” and “skills” to denote a flexible, situational, and adjustable ability to act in the *Lebenswelt* through the lived body or *Leib*.<sup>71</sup>

As already mentioned, educational practice, especially from a phenomenological point of view, does not change and affect only the body as object (*Körper*), but also the way to live the body and to be a body (*Leib*). Merleau-Ponty was interested in the notion of *habit* for the same reasons that he was interested in behavior and movement: they are phenomena that cannot be properly understood either by intellectualism or by empiricism. Indeed,

<sup>67</sup> P. Bertolini and L. Caronia, *Ragazzi difficili. Pedagogia interpretativa e linee di intervento*, Firenze: La Nuova Italia, 1993, pp. 45-46.

<sup>68</sup> M. Merleau-Ponty, *Phenomenology of Perception*, *op. cit.*, p. 151.

<sup>69</sup> Ø.F. Standal, *Relations of Meaning. A Phenomenologically Oriented Case Study of Learning Bodies in a Rehabilitation Context*, Unpublished PhD-dissertation, Norwegian School of Sport Sciences, Oslo, Norway, 2009, p. 54.

<sup>70</sup> H. Dreyfus, “Intelligence Without Representation: Merleau-Ponty’s Critique of Mental Representation,” *Phenomenology and the Cognitive Sciences*, 1.4 (2002), pp. 367-383.

<sup>71</sup> Ø.F. Standal, *Relations of meaning*, *op. cit.*



for Merleau-Ponty, as reported in Standal,<sup>72</sup> “Habit has its abode neither in thought nor in the objective body, but in the body as mediator of the world.” A good example of this would be people who are skillful at typewriting.<sup>73</sup> According to Merleau-Ponty, such people do not have a formal knowledge of the place of each letter among all the others on the keyboard, nor do they respond to a conditioned reflex for each one; rather, “[habit] is knowledge in the hands, which is forthcoming only when bodily effort is made, and cannot be formulated in detachment from that effort.”

Thus, for Merleau-Ponty, habit is a form of “knowing how” rather than “knowing that”. It is embodied knowledge; hence it is referred to as *knowledge in the hands*. The body involved in these habits is for Merleau-Ponty the “third term,” the alternative to the intellectualists’ and empiricists’ account of the body. It is a body that does not find its place in objective space. The spatiality of the body-in-action is the spatiality of a situation rather than a spatiality of a position.

The effect that the phenomenological link between body and consciousness has on education and learning is well explained by Herbert Dreyfus:<sup>74</sup>

What one has learned appears in the way the world shows up; it is not represented in the mind and added on to the present experience. That is, according to Merleau-Ponty, what the learner acquires through experience is not represented in the mind at all but is presented to the learner as a more and more finely discriminated situation, which then solicits a more and more refined response. In so far as the situation does not clearly solicit a single response or the response does not produce a satisfactory result, the learner is led to further refine his discriminations.

Thus, following the suggestions that come from embodied theory, the object of education has to be an experience, a *lived experience*, and the body, a *lived body*. This reminds us the perspective of the abovementioned scholar Piero Bertolini, a student of Enzo Paci. He was one of the leading figures of the phenomenological movement in human science in Italy, who at the end of the 1950s made his first attempt to apply a phenomenological approach to education, in 1958, with the book *Phenomenology and Education*.<sup>75</sup> Bertolini combined his philosophical conversation with Paci with practical experience: in the same period he was the director of the biggest reformatory in Europe, in Milan, for ten years. This extraordinarily rich and strong experience, as well as phenomenological thinking, was the basis of an original perspective on phenomenological pedagogy as a rigorous science.

<sup>72</sup> *Ibid.*, p. 167.

<sup>73</sup> *Ibid.*, p. 166.

<sup>74</sup> H. Dreyfus, “Intelligence Without Representation,” *op. cit.*, p. 373.

<sup>75</sup> P. Bertolini, *Fenomenologia e pedagogia*, *op. cit.*

For Bertolini, the ultimate scope of education is to support subjects in enlarging their worldview by operating on the intentional competence of their consciousness. In education, the ability to make sense of the world is more important than objective reality, and subjects need support in constructing their own worldview. Educators lead children toward the conquest of their intentional consciousness by making them aware of their active role in the construction of their worldview.<sup>76</sup> In this sense the most vivid and modern side of a phenomenological approach in education consists in the improvement of the ability to perceive—as Merleau-Ponty refers to perception—by not taking the world for granted, but being invited and supported to learn in order to understand and authentically see the world.

The lifeworld (*Lebenswelt*), and not the presumed objective correlate of a given phenomenal reality, is the reality taken into consideration by education as a phenomenological science. Education is not intended to discover the cosmic order behind educational phenomena, but is based on the intentional capacity of the subject who lives in the world and therefore on such a subject's capacity to make sense of things, coming in that way to an authentic understanding not of *res* but of *cogitata*.

As we have indicated, the influence of theories related to the embodiment paradigm on education theory is still weak worldwide, but it is definitely growing.<sup>77</sup> Here below we present an example of how phenomenological education can find its proper application in the real practical work.

## 5.2 Meditation: Learning to be Aware

The deep exploration of consciousness (*vinaija*) is at the very center of Buddhist thinking and practice. While according to different traditions there are eight or nine levels of consciousness,<sup>78</sup> within the Zen tradition it is common to say that consciousness will always be one degree above comprehensibility. This concept is close to the one that we have already mentioned concerning the difference between pre-reflective self-consciousness and reflective

<sup>76</sup> *Ibid.*, *Lesistere pedagogico*, *op. cit.*, pp. 182-183.

<sup>77</sup> R. Barnacle, "Gut Instinct: The Body and Learning," *Educational Philosophy and Theory*, 41.1 (2009), pp. 22-33; G. Dall'Alba, "Phenomenology and Education," *Educational Philosophy and Theory*, 41.1 (2009), pp. 7-9.

<sup>78</sup> The first five consciousnesses correspond to the five senses of sight, hearing, smell, taste, and touch. The sixth consciousness integrates the perceptions of the five senses into coherent images and is responsible for making judgments about the external world. The seventh consciousness corresponds to the inner spiritual world; it is the seat of abstract thinking as well as of individual identity and the attachment of the self. The eighth is called the "store-house consciousness"; it is the place where individual and collective karma are stored, and here the seven prior consciousnesses are rooted. Some mahayana schools also refer to a ninth consciousness, *amala*, which lies beyond karma, and which is the pure basis of life, a sort of enlightened condition of buddhahood.

self-consciousness. There is an unreachable level of being aware that consists in the fact that there is a gap between being conscious and describing and comprehending the states of consciousness. However, one who works within the educational field knows that the real problem does not concern the level of consciousness of a subject, his/her ability to be aware; this is just the first step that an educator has to take when facing this question. The relevant problem is related to the conditions for developing this awareness, that is, the pedagogical conditions that allow the subject to make a step from one level of competence to another. This is development,<sup>79</sup> and this is what “becoming aware” means; it is not “being” aware but “becoming” aware that is really pedagogical.

How is it that mindfulness/awareness can be developed? What we suggest, bringing back the teachings of great masters, is that mindfulness/awareness can be considered a skill, a competence among others, like reading, writing, and other activities, and that its development has to be treated in the same way as the others. Mindfulness can be strengthened through a specific training<sup>80</sup> just as a muscle can be trained to perform harder and longer work without getting tired easily. Moreover, awareness is considered part of the basic nature of the mind, one that has been temporarily obscured by habitual patterns of delusion but can be developed, just like every natural potential that human beings have. “As all these habits are cut through and one learns an attitude of letting go, the mind’s natural characteristic of knowing itself and reflecting its own experience can shine forth. This is the beginning of wisdom or maturity (*prajna*).”<sup>81</sup>

So, the development of awareness is a fundamental pedagogical theme, and it is the main goal of meditation as well: that is why we can speak of meditation as education or, better, meditation as an *embodied educational practice* where the role of the body is crucial for self-development. Moreover, phenomenology seems a very appropriate approach for studying the embodied mind through meditation, both because it fits the topic of consciousness as a meeting point between body and mind better than other philosophical and cognitive traditions, and because it offers useful methodological insights.

What we have to learn when we do meditation is nothing else than being able to use our awareness to deepen our presence in the world—not in a mentalistic way, but like a lived presence that has its cornerstone in the body and in the bodily dimension of life. It is embodied presence—embodied

<sup>79</sup> K. W. Fischer, “Mind Brain and Education,” *op. cit.*, pp. 10-11; K. W. Fischer and T. R. Bidell, “Dynamic Development of Action, Thought, and Emotion,” in R. M. Lerner (ed.), *Handbook of Child Psychology*. Vol. 1: *Theoretical models of human development*, New York: Wiley, 2006, pp. 313–399.

<sup>80</sup> N. Depraz, “Mettere al lavoro il metodo fenomenologico nei protocolli sperimentali. Passaggi generative tra l’empirico e il trascendentale,” in M. Cappuccio (ed.), *Neurofenomenologia*, *op. cit.*, pp. 249–269; N. Depraz, F. J. Varela and P. Vermersch, *On Becoming Aware: A Pragmatics of Experiencing*, Philadelphia: John Benjamins B.V., 2003.

<sup>81</sup> F. Varela, E. Thompson and E. Rosch, *The Embodied Mind*, *op. cit.*, p. 96.

mind—that is improved by meditation; it is a sort of cognitive-bodily posture that had to be educated, a new perspective on the world grounded in lived experience and in the body. In the preface to *Phenomenology of Perception*, Merleau-Ponty states that

[t]he whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to rigorous scrutiny and arrive at a precise assessment of its meaning and scope, we must begin by reawakening the basic experience of the world of which science is a second-order expression.<sup>82</sup>

Phenomenology makes a distinction between two different attitudes, the natural and the phenomenological.<sup>83</sup> In our everyday dealing with the world, we accept without question that there is an objective reality that we and other people are part of, and that this reality exists independently of us. This tacit, realistic belief—without which our ordinary dealings with the world would be disrupted by an endless set of questions—is called the *natural attitude*. According to Husserl, science also subscribes to the natural attitude, because it too takes for granted the existence of a world that is thought to be independent of mind, experience, and theory.<sup>84</sup>

Phenomenologists, on the other hand, should be “aroused by and immediately sensitive to the completely enigmatic character of what for sound common sense, is without question and self explanatory.”<sup>85</sup> Unlike the natural attitude, the phenomenological attitude involves questioning the unquestioned assumptions of the natural attitude, i.e., it makes us see the enigmatic in the self-explanatory. The question then becomes how this attitude can be taken up. Meditation, as well as phenomenology, is a technique for opening the eye to a new possibility of rebuilding our worldview, of seeing the world in its own way of appearing to us, and this can be done by educating our bodily consciousness. The first step should be the discovery of the wandering/disconnected mind:

Eventually, it begins to dawn on the meditators that there is an actual difference between being present and not being present. In daily life they also begin to have instants of waking up to the realization that they are not present and of flashing back for a moment to be present—not to the breath, in this case, but to whatever is going on. Thus the first great discovery of mindfulness meditation tends to be not some encompassing insight into the nature of mind but the piercing realization of just how disconnected humans normally are from their very experience.<sup>86</sup>

<sup>82</sup> M. Merleau-Ponty, *Phenomenology of Perception*, London, Routledge, 2002, p. 9.

<sup>83</sup> D. Zahavi, *Subjectivity and Selfhood. Investigating the First-Person Perspective*, Cambridge, London: MIT, 2005.

<sup>84</sup> S. Gallagher and D. Zahavi, *The Phenomenological Mind*, *op. cit.*, p. 25..

<sup>85</sup> Heidegger as quoted in *ibid.*, p. 22.

<sup>86</sup> F. Varela, E. Thompson and E. Rosch, *The embodied mind*, *op. cit.*, p. 25.

This is the proper meaning of mindfulness meditation, a meaning that fits very well with phenomenology—that is, to develop global awareness through bodily awareness, and to develop awareness not only about ordinary objects or reality in general, but also about one's own mind, one's own cognitive posture.

The life of the mind is a flowing life, it is fresh, pure and clean water that flows underground: we do not hear it but we do feel it, we do not see it but we know it is there. The interiority is not seen, it is experienced. And awareness is nothing more than paying attention and giving voice to the life of the mind in its complex and dynamic relationship with the body, avoiding the abstract attitude so common in our ordinary life. As Varela and his colleagues remark,<sup>87</sup>

[f]rom the point of view of mindfulness/awareness meditation, humans are not trapped forever in the abstract attitude. The dissociation of mind from body, of awareness from experience, is the result of habit, and these habits can be broken. As the meditator again and again interrupts the flow of discursive thought and returns to be present with his breath or daily activity, there is a gradual taming of the mind's restlessness. One begins to be able to see the restlessness as such and to become patient with it, rather than becoming automatically lost in it. Eventually meditators report periods of a more panoramic perspective. This is called awareness.

Through meditation, expert meditators seem to reach a cognitive maturity, which reflects the ability to calm the mind, to live a state of rest and control of the flow of consciousness, whereas the beginning meditators are still prey to a random and chaotic flow of consciousness.<sup>88</sup> The crucial point of this cognitive maturity seems to be the fact that it is not just cognitive, but rather embodied: it is a maturity that derives from a skillful and wise attitude toward the body-mind question. Our argument in this paper is that the main goal of any phenomenological pedagogy cannot be a mentalistic, logical, formal or propositional learning, but an *embodied* education or learning that closes the gap between body and mind and reduces the “disconnected mind” and the natural attitude toward reality.<sup>89</sup> This is the great value that meditation can bring to a phenomenological pedagogical theory: meditation is an *embodied educational practice* (not the only one) that aims to reconsider both

<sup>87</sup> *Ibid.*, pp. 25–26.

<sup>88</sup> D. Francesconi, *The Embodied Mind: Mindfulness Meditation as Experiential Learning in Adult Education*, 2010, Unpublished PhD thesis, University of Trento. <http://eprints-phd.biblio.unitn.it/403/>. In this thesis is presented a qualitative study about the effects of meditation on self-perception that has been conducted in Boston at the Harvard Graduate School of Education by Denis Francesconi under the supervision of Prof. Massimiliano Tarozzi.

<sup>89</sup> D. Francesconi, “Embodied mind between education and cognitive sciences: Bodily consciousness and meditation training,” *International Journal of Interdisciplinary Social Sciences*, 4.10 (2009), pp. 19–28; Id., *The embodied mind*, *op. cit.*; Id., “Implicit and Explicit Learning in Motor Cognition. Issues for movement education,” *The International Journal of Sport and Society*, 2.1 (2011), pp. 1–8.

the *body-mind problem* and the *hard problem*<sup>90</sup> from a more pragmatic and experiential point of view, and that tries to develop a *practical knowledge* and a *grounded cognition* where the role of the body is not merely supportive, but crucial. Indeed, focusing on the body allow us to develop the ability to perceive and recognize the flow of consciousness, to keep the mind focused on its own movement within ongoing experience, a sort of control of the dynamic nature of the mind without reducing the dynamism. Phenomenology focuses on consciousness, self, and perception, and meditation seems to be (one of) the best experiences we can offer from an educational point of view, not just to develop motor or bodily skills, nor just to develop cognitive skills; rather, it addresses a whole and integrated identity, a practical knowledge and maturity, an *embodied mind*. As Varela and his colleagues suggest,<sup>91</sup>

[i]t is important to realize that such maturity does not mean assuming the abstract attitude. As Buddhist teachers often point out, knowledge, in the sense of *prajña*, is not knowledge about anything. There is no abstract knower of an experience that is separate from the experience itself. Buddhist teachers often talk of becoming one with one's experience.

### 6. Some Pedagogical Conclusions

In this article we have presented the pedagogical point of view about embodiment, and we have done that by connecting phenomenological pedagogy with the current philosophy of mind and cognitive sciences. An *Embodied Education*, that is the encounter of phenomenological pedagogy and Embodied Cognition, can play an important role within educational sciences, both in the theoretical and practical dimensions, going beyond the traditional position that connects phenomenology and pedagogy only along an existential perspective.<sup>92</sup> Indeed, it seems to us that even though not so much work has been done yet to connect education and Embodied Cognition, such a connection has great potential. In particular, pedagogical attention should be focused on the so-called "first-person perspective" and on bodily consciousness, as the meditative educational experience has shown.

We strongly believe in a pedagogical proposal for a phenomenologically oriented "learning consciousness." This means we should undertake the effort to teach the perception/action couple, thereby developing a higher awareness

<sup>90</sup> F. Varela, *Neurophenomenology*, *op. cit.*, p. 346.

<sup>91</sup> F. Varela, E. Thompson and E. Rosch, *The embodied mind*, *op. cit.*, p. 26.

<sup>92</sup> M. Van Manen, "Phenomenological Pedagogy," *Curriculum Inquiry*, 12.3 (1982), pp. 283–299; Id., *Researching Lived Experience*, *op. cit.*; M. J. Langeveld, *Einführung in die Pädagogik*, 1963, Stuttgart: Klett; V. Iori, *Nei sentieri dell'esistere: Spazio, tempo, corpo nei processi formativi*, Trento: Erickson, 2006.

of the dynamic relationship that we entertain with the *Lebenswelt*. Educating from a phenomenological perspective means to create an *experiential pragmatics* where the person tries again and again to search out his/her own categories for understanding reality, builds and tests the structure of his/her consciousness, refines his/her own description of the world, and develops the first-person perspective.<sup>93</sup> The phenomenological educator helps the subject to exercise him/herself to watch and to better describe lived experience with the aim of improving the ability of the person to create a sustainable and meaningful presence in the world, a better life-of-the-mind.

Meditation, as already stressed by meditation teachers and masters and by many scholars—including the founders of Embodied Cognition, Francisco Varela, Evan Thompson, and Natalie Depraz—can be one of the fields of experience to connect the body and the mind, to learn mindfulness, the ability to stay in the flow of experience with awareness, presence, discrimination, and discernment. Indeed, meditation has an intrinsically pedagogical nature because it aims to develop and improve certain skills that in this case, unlike formal education programs such as school, are more grounded in and related to human experience.<sup>94</sup> Meditation is one practice, among others, that can definitely be considered a field for experiential learning, particularly for adults and in lifelong learning education programs, a way of learning from the practice about the self, a tool for building a subjective *pragmatic of life*. This must be the goal of any education as such, and it definitely is the goal of a phenomenologically oriented embodied education.

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<sup>93</sup> N. Depraz, “Mettere al lavoro il metodo fenomenologico nei protocolli sperimentali,” *op. cit.*

<sup>94</sup> D. Francesconi, “Embodied Mind Between Education and Cognitive Sciences,” *op. cit.*, pp. 24–25; Id., “Pedagogia e neuroscienze cognitive in dialogo. L’esempio dell’esperienza corporea,” in *Formazione & Insegnamento*, 1 (2011), pp. 223–230; M. Tarozzi, *Il paradigma dell’agire narrativo nel buddhismo mahayana*, *op. cit.*, p. 6.

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