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Bodyscapes of the act of learning*

Some years ago I became involved in the study of apprenticeship learning, especially within the field of sport (Jespersen, 1993; 1997). The point of the apprenticeship focus is to expand the notion of learning beyond schools and other educational settings in which learning is institutionalized. Learning is situated everywhere in human (and animal) life and cannot be detached from the social activities and practices in which the learners participate (Lave and Wenger, 1991). In such an interpretational context, I think the medieval institution of learning by apprenticeship is not to be regarded as irrelevant for modem times.

On the contrary, the institution of apprenticeship, integrating learning and the application of the learned in work-places, may remind us of the power of practical wisdom in comparison with educational curriculums of scientific origins. In phenomenological terms, attention is directed at a notion of "landscapes of learning" by returning to that world which, according to Merleau-Ponty (1962, p. ix), "precedes knowledge, of which knowledge always *speaks*, and in relation to which every scientific schematization is an abstract and derivative sign- language, as is geography in relations to the countryside in which we have learnt beforehand what a forest, a prairie or a river is."

Learning is an intentional act, but in order to comprehend what we have learnt beforehand, Merleau-Ponty, following Husserl, speaks of the operative intentionality of the body that is "found beneath the intentionality of acts, or thetic intentionality" and is already at work before any positing or any judgment. If learning is associated with the alteration of behavior in terms of acquisition of skills and knowledge, then one might wonder about the role of the persistent body in learning, "that which produces the natural and antepredicative unity of

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the world and of our life, being apparent in our desires, our evaluations and in the landscape we see, more clearly than in objective knowledge, and furnishing the text which our knowledge tries to translate into precise language."

Whenever Merleau-Ponty speaks of the operative intentionality of the body, I think, he refers to the habitual body. Therefore, the purpose of this article is to situate the conception of learning in the habitual body by distinguishing, from a corporeal analytic point of view, three human worlds. Beyond the primordial world of memories there is the lived world embracing movement and social practices, and the objective world of perceptions, cognitions and the like. Habitual body learning is considered as an original structure of learning in every instance, i.e., a kind of corporeal grounding in the most personal sense of growth and development. Finally, I will try to relate what I am going to call "bodyscapes of learning" to the institution of apprenticeship learning.

Habitual body learning

The force of habit is a recurrent theme in theories of learning, especially in relation to change of "bad" habits. An explanation of the phenomenon of habit has been offered on a physical basis in terms of associative learning, both from the empiricist side of a Humean origin and from a pragmatist conception of habit (James). David Hume (1978) defined habit as one of the principles of nature and thought it derives all its force from that origin. A whole branch of psychology, early behaviorism, became based upon such a conception of habit grounded in a mechanical, individual physiology (Wozniak, 1994).

Although William James was open towards the interference of volition and consciousness, he agreed, for the most part, with the Duke of Wellington, who is said to have exclaimed: "Habit a second nature! Habit is ten times nature." Changes of the organic materials of which living beings bodies are composed of, are rather slow, because the plasticity of the body "means the possession of a structure weak enough to yield an influence, but strong enough not to yield all at once. Each relatively stable phase of equilibrium in such a structure is marked by what we may call a new set of habits" (James, 1961, p. 2). The philosophy of habit is thus, according to James, in the first instance, a chapter in physics rather than in physiology or psychology. Habit, by being conceived on a physical basis, is thus "the enormous flywheel of society, its most precious conservative agent" (James, 1961, p. 10), and change of habits becomes the modem Enlightenment project par excellence.

However, according to Merleau-Ponty, the point of habit is not a naturalistic one, let alone an intellectual endeavor of surpassing habits of the body. He referred to habit having "its abode neither in thought nor in the objective body, but in the

body as mediator of a world" (Merleau-Ponty, 1962, p. 145). To him habit is a form of the bodily power of having a world, whether it be on a biological, figurative or cultural level: "We say that the body has understood and habit has been cultivated when it has absorbed a new meaning, and assimilated a fresh core of significance."

Rather than equating habit with repetitive behavior close to or identical with automatic functioning or with a (re)naturalizing process, Merleau-Ponty begins with a bodily divergence from repetitive behavioral patterns through absorption of "a new meaning" and, thereby, a cultivation of habit. Therefore, habit may be spelled out as a kind of sameness within divergence due to the practical role of the body in learning and change of behavior. By emphasizing the innovative part in the acquisition of knowledge and skills, Merleau-Ponty is distancing himself from the physical basis of habit. However, it is not only empiricism that he accuses of not grasping consciousness in the act of learning. By taking the objective world for granted, intellectualism suffers from the same shortcoming.

Henri Bergson (1991) defined habit as "the fossilized residue of a spiritual activity," which led Merleau-Ponty to ask, whether habit formation, then, is an intellectual synthesis. By distinguishing *habit* memory and *image* memory Bergson thought that we can remember the past without reproducing it in any identifiable representational system. Habit memory relies on the very body in action, whereas image memory depends on using symbolic codes. Therefore, in the light of Bergson, understanding a movement does not invariably depend on an elucidation of what the movement "stands for." But, following Bergson, must we - Merleau-Ponty is asking - "then see the origin of habit in an act of understanding which organizes the elements only to withdraw subsequently?" (Merleau-Ponty, 1962, p. 142).

In answering this question, Merleau-Ponty uses an example of forming the habit of dancing, in which the formula of the movement in question is discovered, by analysis, and then reconstructed on the basis of the ideal outline by the use of previously acquired movements, those of walking and running. But, as Merleau-Ponty now claims, "before the formula of the new dance can incorporate certain elements of general motility, it must first have had, as it were, the stamp of movement set upon it. As has often been said, it is the body which 'catches' *(kapieri)* and 'comprehends' movement. The acquisition of a habit is indeed the grasping of a significance, but is the motor grasping of a motor significance" (pp. 142-43).

Thus, the comprehension of movement, which the body undertakes, is not an intellectual understanding of movement, but is founded in an adherence to the primordial world below personal existence, where the anonymity and generality of a habitual body is playing its own game. An operative intentional synthesis takes place through the habits of the body (as subject) establishing

a pact between body and world with horizons or contexts of acquired, funded meaning. All acts - perceptual, cognitive, motor - take "advantage of work already done, of a general synthesis constituted once and for all, and this is what 1 mean when I say that I perceive with my body or my senses, since my body and my sense are precisely that familiarity with the world bom of habit, that implicit or sedimentary body of knowledge" (p. 238)

However, this is not a way of dealing with an automatic allegiance to the schematic course of a natural, closed world. Acquisition of habit is not a merging, natural process, but an open-minded cultivation in terms of social learning processes generating a difference by transforming and renewing the corporeal schema. Habits constitute what Merleau-Ponty calls the "intentional arc," which relate body and world in one system or structure. As a middle term between presence and absence, habit may thus be the dynamic link of 'body schema' and 'body image', a conceptual distinction clarified by Shaun Gallagher (1986). Habit is prior to its determination into distinct objects of knowledge and, at the same time, beyond the passivity derived from nature; it expresses our power of dilating our human being and changing existence through bodily learning. Therefore, the Heideggarian 'being-in-the-world' might better be expressed in terms of a habitual-being-of-the world in a Merleau-Pontyan sense of comprehending movement.

However, Merleau-Ponty himself did talk about 'the primacy of perception' in summing up his work on the phenomenology of perception, and, later on, he addressed 'the visible and invisible'. As a result, I think, the role of the habitual body in movement has been giving inadequate attention in phenomenology. Perception and especially the primacy of sight have overshadowed other types of sensing (proprioception/kinesthesia and visceral sensing) as though we are primarily "bom to see, bound to behold" (Straus, 1970). The stance of the upright body tends to be frozen in its horizontal vision and surveys at a distance at the expense of our feelings and the motility of our body.

Hans Jonas, the author of an outstanding article on "the nobility of sight," admits in an appendix that the marginal role of our moving body in the phenomenology of the senses is problematic:

> The 'Nobility of Sight' has dwelt on the nondynamic quality of the visual world and the "quietive" transmutation by which this distillate of reality is obtained; and reference was made to its need for cognitive contemplation from other senses and from the sphere of action. We must add that the latter, or the *motility of our body* generally, is not called in *post hoc* only but is already a factor in the very constitution of seeing and the seen world themselves, much as this genesis is forgotten in the conscious result. (Jonas, 1970, p. 328).

Although the motility of our body is recognized in our perceptual world, still, the perceived world is considered as static by Jonas in accordance with the

Aristotelian notion, "to *see is to have seen."* On the other hand, to move and to learn is definitely not a stationary "theoretical" thing, but implies a dynamic process in terms of action and participatory social praxis.

Somatotyping the human figure

In order to convert the perceptive landscape-conception of learning to dynamic "bodyscapes of learning," it is worthwhile to underline that practice of body cannot be restricted to 'outer' fixed or 'inner' constructive ideas of knowledge. Habitual body learning including skill acquisition is dependent on participation in social practices and is better understood as a boundary phenomenon between outer and inner perceptions, image, representations, and the like. Habits and skills are bodily presentations of cultural abilities and innovations in social contexts in the lived world. Body-world relations are attracting attention for just this reason.

The original pre-objective world is a world in which physiognomic perception as a kind of "primordial silence" plays a role. Erwin Strauss speaks of how the children's world of toys and fairy tales is understandable and appeals to them because it is full of physiognomies. He reminds us that the existence of the inanimate, of mere things, is a late discovery. Furthermore, he observes that "the elimination of physiognomic characters is a slow process; it is never complete. They are always present; they regain their full power, not only in dreams, in inebrity, and in the psychoses, but in all those situations where we still live in the landscape." (Straus, 1966, p. 248)

Therefore, it may be extremely illuminating to get a closer look at the somatotyping branch of psychology as exemplified in the works of, for example, William Sheldon (1940; 1942). Through anthropometric techniques Sheldon identified and scaled three major components of the constitution distinguishing the ectomorphic component related to leanness and the appearance of being stretched out, the mesomorphic component related to observable squareness and muscularity and the endomorphic component, related to the roundness of the body.

Sheldon did not stick solely to the varieties of human physique, but connected the somatotyping with three primary components of temperament. He named them respectively cerebrotonia dominated by the inhibitory and attentional functions of the cerebrum, somatotonia revealing roughly a predominance of muscular activity and of vigorous bodily assertiveness, and viscerotonia dominated by the gut and by the function of anabolism with the digestive tract considered as king.

Nowadays, the somatotyping studies are considered rather obscure within psychology. Sheldon's work is assumed to have a very weak conceptual and

experimental basis, and, in general, typology - somatotyping, stereotyping, and the like - is in rather bad repute. Surely, considering behavior as a function of the structural constitution of an organism is an echo of a mechanical cause-and- effect relationship, which, in my opinion, should be abandoned.

However, there may be an unnoticed cultural insight to be gleaned from Sheldon's work. At least, this is what psychologist Joseph Lyons (1987) thinks. He describes our behavior in terms of stylistic variations that are inseparable from our physical experience of ourselves. In the following section three styles of behavior are reviewed in the specific context of learning in order to expand the notion of learning beyond the "ectomorphic," cognitive perspective in school learning. At the same time, the three style-correlated modes of learning are spelled out in terms of the respective role of the body.

Joseph Lyons distinguishes three modes of learning in accordance with Sheldon's morphological somatotyping. The well-known, ecto style of learning deals with words and thoughts, while acts characterize the meso style, and expressive movements or gestures form part of the endo style. The relevance of such learning patterns may be clearer when they are related to perception and memory, mirroring two major categories of acts, which Ryle refers to: *To see* means simple to have finished seeing and *to win a race* means completing the process we call running a race. Thus, Lyons describes the two categories of acts in the following way:

> The first, of which perception is the prototype and ecto learning an excellent example, consists of a terminus without a prior process leading up to it. The second of which memory is the prototype, consists of a process leading to its conclusion; running a race or a judge trying and then deciding a case are excellent examples of this categories. Ecto learning is then more like perception than like memory, and endo learning is just the reverse. Meso learning partakes of some of the elements of both categories. (Lyons, 1987, p. 124-25)

Therefore, when we are concerned with an expanded notion of learning beyond "to know is to have learnt," both the so-called endo mode and the so-called meso mode of learning may attract our attention.

Endo learning

Lyons describes the endo mode of learning in terms of a process of change, in which learning is taking place in a passive manner, since there is no actor to do the act and no audience to attend to the doing. Endo learners are unreflectively doing what they do while satisfying some of their ongoing needs in so doing. Thus, the act of learning is grounded in the primordial world.

As an example of this mode of learning, Lyons refers to a child playing in the water at the seashore just for fun and in the course of this activity "learning" not to be afraid of the water and subsequently staying around in the water for a while, learning to swim after a fashion. However, this is not the same when a clear-cut point in the process occurs at which the learner can say, "Hey, I can swim", as might, for example, happen if the alternative method of dropping the child in the water has a successful outcome.

Since endo learning is often hard to see, i.e., there may never be an identifiable *what* in the case of endo learning, this mode of learning cannot be apart of a curriculum, let alone a goal oriented practice. Therefore, we may perhaps more appropriately refer to this mode as a kind of process in terms of maturation and development, a shift in faith, a discovery, a peak experience, and the like, in short, an existential revelation.

The precondition for this mode of learning is not an existing body of knowledge and skills represented by a teacher or a trainer functioning as a transmitter or a source of interrogation. Such an objectified way of school learning presupposes a kind of independent entity separated from the hidden sources of learning. These sources are an outgrowth of a joint engagement in the lived world of human beings prior to any discrimination between a teacher and a learner and a distinctive practice of learning.

Rather, the learner becomes absorbed in the whole situation, as in the common example of learning one's mother tongue by what we might call the immersion method: here there is no teacher as such, only a more or less stimulating learning environment in terms of apprenticeship. If we accept that the body itself does not function in a symbolic or instrumental manner, but demands models in order to learn, then questions about imitation and identification in apprenticeship learning and habituation become relevant (Jespersen, 1997).

Lyons (1987, p. 113) exemplifies this original level of learning by referring to how he, as a child, somehow learned to walk as his father did and then remembered it. When he was subsequently called on to walk - in a situation appropriate to walking - his memory would then serve him well, and he would then walk as his father did although in his own way, since walking can never be a complete repetition of an other's style, but just "a look alike."

Thus, in the original mode of learning there is neither any goal as such nor any specific practice involved, but just a person feeling comfortably at home in an ongoing situation, from which other stages of learning organically flow out. The actual, ongoing situation is given or granted, thanks to other persons being - mostly unwittingly - imitated in social practices in unique personal ways, whereby activities are transformed by the participants into "creativities." Therefore, endo learning may also be described as a kind of corporeal model learning, not to be confused with de-situated associationistic or cognitivistic schemes of learning.

Meso learning

At the subsequent activity level of learning, the *how* of learning to assume an upright posture and learn to move oneself, becomes a practical problem. Intercorporeal learning is replaced by questions of how to go about and how to work at a desired end, occasionally through concrete demonstrations to oneself - "I can" - and to others as to what one has learned. The Deweyian catchword "learning by doing" offers a sense of understanding, what is at stake in this mode of so-called meso learning. Likewise, the notion of feedback is of central importance in this respect.

The mysteriously ill-defined boundary area between inner and outer perceptions is figured out in terms of obstacles to be surmounted, since this mode of learning is characterized by a rather clear presence of an attainable end or a known goal in practice. Therefore, athletic disciplines like hurdle races and obstacle races are prototypical and almost banal examples of a way of life demanding learning by observation and practice, often in a drill-like manner.

In such races, there is a race course with a number of hurdles or obstacles and a finishing line, and each participant or, rather, competitor is offered - in principle - an equal opportunity at the point of departure of making a difference in fast running, i.e., by cutting an exemplary figure at the shortest possible amount of time. How the individual style of running is acquired and how the physical body is becoming fit for a fight for personal space may be matters for sport sciences. Undoubtedly, the well-known saying, "practice makes perfect" is not the whole truth. Besides, all kinds of rational strategies may be carried out in order to achieve the maximal advantage of one's competencies and efforts.

However, last but not least the performance has to be founded pre-objectively in a corporeal, modeled fashion bearing witness to the role of an operative intentionality stemming from the original mode of learning. The quest for making a difference has to be interpreted on the background of a fear and trembling for disappearance into what Merleau-Ponty in his later works denoted as "flesh," a kind of identity without difference, an original, vague world of flowing figures and decentered, intercorporeal selves.

In relation to meso learning, it is also worth mentioning the limits to overcoming known obstacles, although particular limits may be the last to be accepted in sporting endeavors. Lyons is especially paying attention to the observation that there are - practically speaking - no unanswerable questions in the meso mode: "If a question can be phrased sensibly, it can be answered; which leads to the typically meso advice to frame one's difficulties in the form

of questions so as to be able to overcome them. One consequence is that those who typically learn in the meso style are unable to question their own questions" (Lyons, 1987, p. 117).

Therefore, as Lyons stresses, for the meso learner an important part of the *it*, for example, trying to win a race, is the specific activity that gets the learning done. The emphasis is not on the *I* coming to terms with a problem in all its ramifications, nor on the whole situation, which points in the direction of a third and well-known mode of learning residing in such mental processes as thinking and knowing at a distance.

Ecto Learning

The emphasis in meso learning is on the immediate world unlike ecto learning, where immersion in ongoing situations and concrete goals are left by the waysite, in favour of questioning about ideas or concepts. Rather than immediate action or felt situation, symbols, abstractions, and other forms of mediation are considered beforehand. For the cognitive psychology of learning, the ecto mode of learning is the only one. According to such a point of view, even learning in terms of modeling is based upon a new idea about behavior, i.e., one first knows about something before one may actually deal with it (Bandura, 1977). Lyons notices that "the way to learn something in the ecto style is to report to yourself what you already know that you know, and then tell yourself how you know it. Let your body catch up with your mind." (Lyons, 1987, p. 123).

When curricula are worked out on the basis of such thinking about learning processes, the practice dimension becomes an epiphenomenon, while all kinds of original apprenticeship learning by the immersion "method" and the role of the body itself are completely left behind. By keeping a distance between one's comportment and knowledge about things in the world, one may be inclined to characterize the whole notion of cognitive learning as disembodied or a kind of "excamation," i.e., a modem form of corporeal exorcism. By forgetting habits of body in terms of memory, the presence of the past is condemned to death, and life is reduced to learning and living for a distant future.

Asking a child, "what have you learnt in school today" indicates, that a visual logic recurs in common understanding of knowledge and learning. Asking only about the acquired result of learning, which in itself may be difficult to respond to, is a way of neglecting the prior process leading up to the possible acquired knowledge and skills. Therefore, it is no wonder that the role of the moving and habitual body in learning processes is often left out of sight in folk ideas and scientific theories of learning.

Once again, an objectifying sight of the world is identified with a kind of distiller experimentally producing "packets" of information/knowledge, which are finite, valuable and certain if not true in some ultimate sense. Then, in the educational sphere, the next step is to transfer these "dead" bodies of knowledge just like the duty of the mailman is to deliver postal packets unopened. Or, alternately, shifting the perspective from the teacher to the student as a questioning being, the didactical question may be reversed to a question of setting up the circumstances in which a kind of constructive introspection can occur.

However, in the approach to an urgent question of skill teaching and learning, the role of the teacher changes immediately, since skills are neither bookish nor questionable as such but embodied and situated in the lived, pre-objective world including school practices. Therefore, the culture of education is not only to be associated with postal services and introspection.

Furthermore, studies of teachers' personal practical knowledge show, that the prevailing conceptions of teaching and learning are, at least in part, out of keeping with the way teachers' understanding of their world affects the way they structure classroom experience and interact with pupils/students, parents, colleagues, and administrators. These studies take the experiential dimensions of teaching and learning seriously, and, consequently, new lines of curriculum research are coming to the fore (Johnson, 1989).

Still, there might be an important difference between institutionalized learning for the future in an age of uncertainty outside the schools compared to a notion of bodyscapes of learning in which one is situated as participant in social practices. Therefore, the central point of learning has to be found elsewhere than in the perceived, objectified world.

Apprenticeship learning revisited

According to the *Encyclopadia Britannica* (2002) apprenticeship is "training in an art, trade, or craft, under a legal agreement defining the relationship between master and learner and the duration and conditions of their relationship." By focusing on a legal agreement the conception of historic apprenticeship is narrowed down to a constitutional one leaving the institutional origin of apprenticeship out of consideration.

Furthermore, by emphasizing the formal duration and conditions of the relations between master and learner, the social setting and practice as well as the active, participatory learner are not giving its due. What is extremely remarkable is that institutional apprenticeship is an agency of learning by making something and becoming somebody ("I can"), i.e., there are no sharp divisions between acquisition and application of skills and knowledge, laboring and learning, work and education, or learning and production as found in modem society.

Apprentices were members of the corporate community and interacted as part of their particular corporations. Past endo learning (memory), present meso learning (movement) and imagined ecto learning for the future (perception and cognition) were not institutionally separated (Jespersen, 2002). To appeal to metaphor, if life-long-learning is not to be associated with an experience of placelessness reminding one of a detached, surveying observer on the surface of the world, then we need to appeal to, for instance, the flowing of a river, the in-depths, habitual body learning processes anchored in the genesis of time, and the situated, swimming person experiencing the same river as a field of presence.

Thanks to our corporeal being we are and remain apprentices of our own body by learning to move ourselves in social situations without forgetting the past that serves to anchor our temporal being and existence (Sheets-Johnstone, 2000). In every instance, the grounding is carried out by the body itself, including cognitive matters, although this world in particular aims at closing the doors of movement for the benefit of a detached, self-willed and disembodied universe. Therefore, the lesson of apprenticeship learning is a story of anchored corporeal beings living in bodycapes of learning and movement. A cognate way of understanding corporeal learning processes has recently been launched by Maxine Sheets-Johnstone (2002) by addressing "kinesthetic memory."

Future studies of apprenticeship learning have to be aware of Merleau-Ponty's rejection of the philosophy of consciousness. In *Phenomenology of Perception* both empiricism and intellectualism were blamed for not grasping consciousness in the act of learning. This was, he thought, due to an objective volatilizing of the subjective role of the habitual body itself in perception. Merleau-Ponty's next important step, in order to overcome certain difficulties in the philosophy of consciousness, was to launch a concept of *institution* in personal as well as in public history. To him, institution signifies an "internal circulation between the past and the future." Thus, it is a "historicity of life" which, for example, "lives in the painter at work when in a single gesture he links the tradition that he recaptures and the tradition he founds." By conceiving institutional, incorporating practices, he wished to outline the development of phenomenology into "a metaphysics of history" (Merleau-Ponty, 1988).

Finally, Merleau-Ponty appears to identify perception with movement. According to Barbaras (2000, p. 86), his critique of objectifying perception as well as his rejection of philosophy of consciousness leads him "to question the deep-rooted idea that perception is the province of knowledge, a mode of knowing. If perception is really the disclosure of a pure transcendence, it cannot be knowledge and, consequently, knowing itself has to be grounded on another kind of relation with the world" - in lived movement and, we may add, the act of bodily learning in institutional practices.

What stands in the way of my seeing myself is first something that is a *de facto* invisible, namely, my eyes, but beyond this invisible, there is a *de jure* invisible: "I cannot see myself in movement, witness my own movement. But this *de jure* invisible signifies in reality that *Wahrnehmen* and Sz'c/z *bewegen* are synonymous; it is for this reason that the *Wahrnehmen* never rejoins the *Sich bewegen* it wishes to apprehend: it is another of the same" (Merleau-Ponty, 1968, p. 254-55).

By addressing the issue of "Bodyscapes of learning in movement," which historic, corporate apprenticeship is dealing with in particular, and which, surely, has not disappeared due the persistent role of the habitual body in learning, I hope to have shown the relevance of Merleau-Ponty's approach, involving the "practice of body," to studies of learning in institutions.

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