

Temi ed eventi

Thinking of Identity as Self and Body. Recent Contributions from Phenomenology, Cognitive Studies, and Neuroscience

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Riassunto *Pensare l'identità come sé e corpo. Contributi recenti da fenomenologia, studi cognitivi e neuroscienze* – Recentemente la fenomenologia ha intrapreso un dialogo sempre più intenso con le scienze cognitive, le neuroscienze e la psicopatologia, i cui punti-cardine sono stati: la struttura della coscienza e degli atti di coscienza; le diverse forme di consapevolezza di sé; l'investigazione del sé e dei suoi disturbi; l'intersoggettività. Due volumi di recentemente pubblicazione attestano la prosperità di questo dibattito. Il primo – *Body Memory, Metaphor, and Movement* – verte sulla soggettività incarnata, rivolgendo particolare attenzione al fenomeno della memoria implicita del corpo e raccogliendo contributi provenienti dall'area fenomenologica, da quella delle scienze cognitive e delle terapie basate sull'*embodiment*. Il secondo – *The Oxford Handbook of the Self* – raccoglie contributi provenienti dalla ricerca fenomenologica, ma anche da quella cognitiva e psicopatologica, indagando il sé da prospettive diverse, come quella dell'esistenza corporea, della formazione dell'identità personale, dell'indagine metafisica, della dimensione morale e delle patologie del sé. In questa sede si intende passare criticamente in rassegna questi volumi, discutendone l'impatto teorico sulla corrente ricerca fenomenologica e cognitiva.
PAROLE CHIAVE: Identità; Memoria corporea; Intersoggettività; Individualità; Processi cerebrali.

Abstract In recent years, phenomenology has increasingly engaged in dialogue with the cognitive sciences, the neurosciences, and psychopathology. In particular, the foci of this debate are: the structure of consciousness and conscious acts, the different forms of self-awareness, inquiry concerning the self and its disturbances, and intersubjectivity. Two recent volumes bear witness to this flourishing debate. The first one – *Body Memory, Metaphor, and Movement* – deals with the issue of embodied subjectivity and is particularly concerned with the phenomenon of implicit body memory with a collection of contributions from phenomenology, the cognitive sciences, and embodied therapies. The second one – *The Oxford Handbook of the Self* – brings together contributions from phenomenological, cognitive, and psychopathological research and addresses the topic of the Self from the diverse standpoints expressed by these areas of studies. The issue of the Self is analyzed with regard to various perspectives such as bodily existence, the formation of personal identity, metaphysical inquiry, the moral dimension and pathologies of the self. The essay aims to provide a critical assessment of these volumes and to discuss their theoretical impact on current phenomenological and cognitive research.
KEYWORDS: Selfhood; Bodily Memory; Intersubjectivity; Individuality; Brain Processes.

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IF ONE IS LOOKING FOR A DEFINITIVE overcoming of Cartesian dualism in the field of philosophical research, one has to consider the recent volume edited by Sabine C. Koch, Thomas Fuchs, Michela Summa and Cornelia Müller,¹ which represents a very rich volume on the topic of the body.

Starting from Merleau-Ponty's conception of the body as a living and dynamic structure of the subject, the authors propose a multidisciplinary reading of bodily experience covering the ambits of phenomenology, the cognitive sciences and embodied therapies. In this way, the presented study is neither a mere theoretical reflection on the bodily aspects of life nor a simple collection of empirical data lacking any conceptual framework. On the contrary, the volume succeeds in combining the main insights of a solid philosophical background, i.e. the phenomenological one, with both the most recent findings on the neurophysiology of the body and the medical application of such scientific results.

Thomas Fuchs, whose studies on the *Leibgedächtnis* serve as both the chief inspiration and a reference-point for many contributions in the book, presents the basic features of a phenomenological interpretation of the special phenomenon of *body memory*.² The first assumption for being able to confer to the body the capacity of remembering is enlarging the notion of memory beyond the sole act of mental recollection. Starting from the idea of the body as a living formation able to store – i.e. *to embody* – its own past experiences such as movement and perception, referring by doing so to French thinkers such as de Biran, Ravaisson, Bergson, and Merleau-Ponty, Fuchs proposes a notion of body memory as «the totality of these bodily capacities, habits, and dispositions as they have developed in the course of one's life».³

Joining the Merleau-Ponty's notion of *operative intentionality*, which plays a crucial role in the formation of habitualities, with the more recent finding of the *implicit memory* by cognitive psychology, Fuchs shows how the remembering by body doesn't entail a representation

of the past, but rather its re-activation within the present performances of the body. The past, as once lived, can be re-lived through and by the body, which can re-enact the already acquired behaviors and experiences putting them in new current context.

The liveliness of the body allows avoiding a static recovering of the lived past, since it involves precisely the actualization of the past event in connection with the present surroundings; here the body doesn't experience a sense of disorientation and unfamiliarity, but rather it finds inside of itself, i.e. inside of the developed history of its own articulations, the resources to face the novelties and «to make ourselves feel at home in situations».⁴

Though he openly refers to the kinds of body memory described by Edward Casey, i.e. habitual, traumatic, and erotic, Fuchs makes this tripartition even wider by casting the remembering by the body into different albeit intertwining levels of experience. The six proposed forms can be coupled according to their common root lying either in the spatiotemporal dimension, or in the intersubjective situation or finally in the suffering condition of the body.

This *procedural memory* is based upon the individual's sensorimotor and kinesthetic abilities to perform a series of exercises lasting and repeating through time; such a memory inserts itself into the broader context of spatiality surrounding the body that allows developing a *situational memory* as well. Both temporal and spatial, the body doesn't live in isolation from others, but quite the contrary it experiences being continuously related to others; this leads the body to build up an implicit style of relating to others along with a habituality for posturing in front of others, both capacities aiming at developing an embodied personality grounded on the *intercorporeal memory*.

This pre-reflective skill of own body to continuously refer to others is linked to the other side of same process, i.e. the corresponding predisposition to shape bodily behaviors and roles started by others through a continuous process of imitation and identification called by Fuchs *incorporative memory*. By the contact

with others the last two forms of body memory derive too: on the basis of an experience which led us to feel suffering, one usually develops a *pain memory*, which plays the role of avoiding a recurrence of the already lived experience through recognition of a situation or a person somehow referable to the pain experienced in the past.

Once such a suffering becomes harder and heavier, it assumes the shape of a real trauma triggering the consequent *traumatic memory* which, although one may try to confine it in the deeper areas of oneself, reemerges unwillingly every time the current situation succeeds in re-activating the embodied references of the traumatically lived experiences.

As a conclusion of his essay, Fuchs stresses the relevance of body memory and of its different forms in the construction of current experience. Given its lack of any medial shape of recollections such as images or words, the body memory stands for an immediate and abrupt re-entering of the past into the present, which gets continuously reconstituted on the basis of the bodily re-enacted experiences of the embodied subject.

The conceptually basic presentation by Thomas Fuchs of the notion of body memory is further developed in its main theoretical implications by both Michela Summa and Maxine Sheets-Johnstone.

Michela Summa deals with the implications of body memory in the formation of the meaning on a perceptual level, referring to the phenomenological presuppositions of the idea of a remembering by body.⁵ In her contribution, the author explicitly aims at comparing the phenomenological approach to the experientialist one worked out by Lakoff and Johnson.

Although the experientialism too is based on the assumption of the role played by bodily features in the constitution of meaning, such a theory emphasizes the rootedness of the meaning in the signs and its physical location in the neural structure of the brain. In this way, as Summa remarks, one can easily understand «that this definition deeply conflicts with the phenomenological theory of meaning», be-

cause, «neglecting the ideality of meaning, it makes a mistake analogous to the one made by psychologism with respect to the pure logic, but also because it goes a step further than psychologism by reducing meaning to the factual and material structure of the human brain».⁶

A different perspective, according to the author, can be proposed by adopting a phenomenological stance, on which basis one can approach the bodily perception referring not only to the neurobiological laws that determine any common perceiving like, for instance, seeing the sky, but also and above all to the layer of givenness of perceptual experience, which goes beyond the mere physical level.

Recalling an example made by Lakoff and Johnson themselves, Summa states that the fact that seeing the blue of the sky doesn't mean the sky *has* the trait of blue, doesn't involve reducing the whole experience of seeing the blue sky to the neural circuits enabling such a perception.

Precisely the bodily dimension of such a perceiving lies at the basis, as to the *meaningfulness* of this experiencing, of the scientifically detailed explanation of seeing the sky as blue. By recurring to the notion of body memory, Summa aims at showing how the ambiguity of the body, characterized by Husserlian definition as «the “turning-point” (*Umschlagstelle*) between sense and natural causality»,⁷ allows rendering experientially accessible the constitution of meaning within the embodied subject.

The reference to the experience is by no means accidental, since the author, according to the phenomenological standpoint adopted, highlights both the ideality of meaning, i.e. its irreducibility to the factual happening, and the temporal-genetic layer of the constitution of meaning, i.e. its stemming from the life-worldly history of the subject of experience and not from a purely formal universe of signification. In order to develop her account, Summa joints the notion of body memory to the Husserlian concept of *Typus*. The latter means the inner connection of the constituting synthesis that underlies any sensible experience: multiple data coming from different realms of sensation, e.g.

touch, vision, taste, can be unified in a single *Typus* of perceived object, which repeats itself in any further similar experience.

The possibility of iterating the same type for diverse objects grounds on the continuous reactivation of such a type in various contexts. As such, the *Typus* is not properly a concept, rather it anticipates and enables the formation of a concept, since it is rooted in the passive synthetic process underlying the mental activities of the experiencer. Basing on the remarks by Dieter Lohmar, Summa stresses the similarity between the Husserlian notion of *Typus* and the Kantian one of *Schema*.

Like the latter, the former has a synthetic trait, working to give rules to the multiplicity of experience, thus allowing the perception of something. But, contrary to Kant's schema, thought as a medium enabling the application of categories to reality, Husserl's type deals with the *genetic constitution* of meaning and its phenomenology «aims at defining the processes that make possible the institution, the sedimentation, and the reactivation of familiar perceptual patterns».⁸

The passive, synthetic layer of constitution is precisely what allows connecting the notion of *Typus* to the one of body memory: the constant reiteration of the same traits in different objects stems from the traces past experiences left in the bodily features of the experiencing subject. The habitualization of diverse perceptions is made possible by the temporal associations of synthetic processes that stand for both a trait of bodily memory and the mark of typological apprehension.

This complex interplay between the body as intentional networks of experience and the type as steady generalization of the individualities of these experiences permits us to trace the formation of meaning back not to its neural basis, but rather to its transcendental origin in the subject living in a constant relation with her own surroundings. As «a pre-categorical structure organizing our experience», the types «are experiential patterns stemming from our intentional relatedness to the world, and their intentional constitution can be reflectively

brought to consciousness and be thematized»⁹.

The genetic background of the work performed by body memory is even more stressed in the reflections by Maxine Sheets-Johnstone, who deals with the dynamics of bodily movement as the basis of kinetic memory.¹⁰ Starting from the inquiries worked out by both Fuchs and Jeannerod, the author emphasizes the primality of the motility of ourselves in comparison to other physical skills such as vision or hearing, since it is not possible to close the kinesthesia off, i.e. to deprive ourselves, even though temporarily, of our capacity to move.

If we experience such an incapability, we find ourselves in the realm of pathology: «pathology apart, the dynamics of our own movement, an awareness of our body-in-motion is an insuppressible fact of life».¹¹ To be insuppressible means not being subject to a conceptual operation of division, like in the case of other kinds of memory that undergo a taxonomy based on a dichotomist procedure. On the contrary, the kinesthetic memory being linked to the original motility of our life can be investigated according to a holistic inquiry following the spontaneous dynamics of the body.

Such dynamics are clearly recognizable in what Lurija calls the *kinetic melody* of the learning performance such as for instance writing, dancing or other similar motor activities, in which the iteration of the practice takes the basic shape of an introjected automatism by remembering. As Luria shows, given some neurophysiological conditions for executing a normal kinesthetic apprehension, memory as motility is inscribed in the body and furnishes the dynamic patterns enabling the potentialities of the subject's doing – the *I can*.

The inscription of the melodic kinetic memory inside the body involves highlighting the spontaneity, i.e. the automatism of such a form of memory, which occurs along the flowing of temporal experience; once instantiated, the movement flows in its turn within the general flowing of corporeal living and by doing so it goes forth becoming ever more familiar as a constitutive part of our personal development. Though she puts the emphasis on the automa-

tization of basic movements, Sheets-Johnstone warns about the risk of conceiving such a motility as a mechanization, what would happen using the term “motor” to describe it.

This term, according to the author, is not able to reveal the *living* dimension of bodily self-movement, since it reductively refers to an inner force fully mechanical without any reference to the body as an organism rather than a machine. The conceptual solidness of the notion of *kinesthetic* is due to its adherence to both the experiential and neurological layers of the subject matter, since, by referring to the temporal feature of melodic memory, it succeeds in describing the whole process of continuous learning by a bodily organism.

Both Merleau-Ponty’s conceptions of habit and of body image and Gallagher’s and Cole’s views of body schema lack this fundamental reference to the living core of reality, for they are based on conceptual constructs missing the very contact with the experience. It depends on what the author calls «a bias of Western thought that anchors the reality in the spatiality of things to the exclusion of their temporality»,¹² according to a pointillist explanation ignoring the *dynamic* layer of bodily performance.

Such a layer is instead well-grasped by a phenomenological account of the body meant as a form of life, a natural-born-mover, wherein to act and to be affected are two sides of the same coin, both meaning the way in which the body remembers by moving and so it constantly develops a dynamic, i.e. living, self.

The contribution by Elizabeth Behnke relates the traumatic memory mentioned by Fuchs to the kinesthetic memory Sheets-Johnstone dealt with.¹³ The author starts by carefully offering a philological explanation of the term *enduring*, which means both the capacity to suffer and the lasting of such a capacity. Compared with the analogous term in German and with its origin in Latin and Indo-European languages, the notion of *enduring* aims at phenomenologically describing our skill to withstand a traumatic experience while it is occurring and, by doing so, to re-shape our own

body living such a persistent experience.

The *kinesis* of this peculiar phenomenon is fundamental to better understand it: during a painful experience, the body reacts according to a double movement of driving away from the pain and of moving closer to oneself. By doing so, one «creates a zone of tension whose lived meaning is that of attempting to establish and maintain a boundary, not just for a moment, but in a sustained effort of self-preservation». ¹⁴ In case of a pain that structurally damages the personal integrity, one can speak of “boundary violation”, which describes the experience of a *trauma* meant as a breach within his/her own constitutive temporality.

Precisely with regard to the temporal structure of enduring, Behnke grounds her reflections on the phenomenological account of time referring especially to Husserl’s latest manuscripts. Already in action in a normal, i.e. non traumatic, experience, the threefold feature of time as retention-impression-protention works also as the trauma arises. As a violation of the usual temporal flowing, the traumatic event breaks the common passage from the past via present to the future, since it indefinitely extends the current situation transforming the “now” from a transit-phase to an enduring condition: «in such an experience, the open world may collapse into a here and now from which I cannot escape – all that is left of the temporal horizon is the leading edge of the now (in Husserl’s terms, the “protentional” dimension of the living present), the very moment where the violation is ongoingly maintained». ¹⁵

Given the permanent state yielded by trauma, one is no longer able to project a future, but she has only to withstand with her own bodily skills a lasting event that occurs right in the same body as a temporal-kinetic structured one comprising both its origin and its resistance. Like in a sort of continuous process of self-transformation, the temporality of the traumatic experience, which is founded in the natural articulation of the body and develops thanks to it, can be overcome precisely by appealing to the same temporal structure allowing it.

Through what Behnke calls a «restorative embodiment work» meant as a «mode of somatic education»,¹⁶ which is different than a therapy, she states that one must try to find in herself the resources to change this enduring condition of trauma re-opening to the future the violated boundary. It is about getting possession again of her own body by living-consciously-through it, i.e. to refer to her own temporalization as a self-temporalization, a process that we are not only undergoing, but can also lead towards a different situation than the current one. It involves the overcoming of enduring as a mere withstanding of a re-enacting of the normal threefold flux as retentional, impressional, and *protensional*.¹⁷

The close connection between the bodily dimension of subjectivity and her mental activities is especially stressed by Christina Bermeitinger and Markus Kiefer, who propose the idea of a corporeal location of theoretical notions.¹⁸ Starting with a presentation of the so-called “amodal” theories of knowledge, which conceive of the concepts as abstract mental entities having no reference to perceptual and motor areas, the authors offer the alternative idea of the “modality-specific” theory, according to which the «conceptual representations are grounded in perceptual and motor representations», what is also called the «embodiment approach». ¹⁹ This is based on a series of assumptions the authors quote from Margaret Wilson’s well-known article from 2002,²⁰ i.e. the being situated of cognition, its time-relation, the openness to the environment meant as a part of the cognitive system, the link to the action, and the bodily reenactment of knowledge.

Precisely the last feature highlighted is presented more in detailed by Bermeitinger and Kiefer, who stress, on the basis of recent empirical findings, the crucial role played by the re-activation of motor and perceptual processing in the development of conceptual activities. The construction of meaning finds itself at the end of a genetic route begun with the bodily storing of representations that re-emerge at later times triggered by precise stimuli in (also

simulated) situations.

The reference to the peculiar situation allows emphasizing a second basic mark of the embodied cognition, i.e. the being-situated of concepts, a trait that becomes clear if one looks at the concomitance of the activation of a concept and of the co-emergence of representations of associated states.

This constant orientation of any concept, even if it means abstract entities like “truth” or “freedom”, to the context both current and past, wherein the concept gets thought, is a further evidence of the role played by the body as an aggregation of sensorimotor systems in the theoretical activity of the subject. To be rooted in a surrounding that takes part in the formation of our conceptual life means to think in order to act in such a surrounding.

Being dependent on a bodily existence continuously networking with its context, the concepts «are supposed to essentially enhance our interaction with objects in the environment»²¹ and, in order to do this, they have to flexibly adjust themselves to the current situation. Far from being a fixed and atemporal abstraction, a concept stems from the neural processes developing in the sensory and motor systems and inscribes itself in the history of the body, both present and past, and for this reason the embodiment approach is able to offer a clearer explanation of what concepts are and what they are for.

The relevance of the bond between cognition and action is plainly highlighted by Christina Jung and Peggy Sparenberg, who ground their reflections on the mirror mechanisms of the brain to show how the individual’s cognitive behavior is inherently linked to acting towards others.²² Both in the case of the imitation process instantiated by mirror neurons and in the correlated phenomenon of the understanding of other intentions, it is clear to what extent the bodily foundation of cognition makes it a higher level of an action already in place.

The authors observe that such an action-based development of cognitive performance is evident in the constant tendency not only to imitate and to understand others, but also to

anticipate, i.e. to foresee other behaviors in a dynamic-temporal context, in which «there is a time delay which needs to be bridged by prediction [...] allowing an individual to react quickly and successfully in our environment».²³ The reference to the role played by the mirroring in the neural processes allows the author to enlarge the consideration of bodily interaction to the sphere of emotions. The neural basis of empathy is well-proven by a series of empirical studies stressing the relevance of the stimulation of certain parts of the body to trigger specific relational reactions like smiling.

Moreover, the bodily location of emotions is also shown by the close connection between the emergence of memories of past events and the stimulus of the corresponding part of the body involved in the original occurrence of such event. The constant activation of bodily mechanisms in conjunction with the encounter with others attests to the crucial role played by the intersubjective context for the formation of the self as a physical self, according to a double process of overlapping and distinction worth studying, considering that «being in a social setting modifies our cognition in order to enable us to communicate and interact with the humans beings around us».²⁴

A contribution by diverse authors such as Caterina Suitner, Sabine C. Koch, Katarina Bachmeier, and Anne Maass (*Dynamic embodiment and its functional role*) recovers in a certain manner the main topics previously discussed like embodied cognition, body memory, and bodily dynamics in order to cast them in an empirical framework of findings.²⁵ Basing on the general assumption that «it is difficult to even argue for a mental process that is not in some way grounded in physical experience»,²⁶ the authors go forth to illustrate the functioning of bodily dimension of experience in both on-line attitudes and off-line attitudes.

With regard to the former, the authors refer to the categories of “smooth” and “sharp” rhythms as influencing the movement qualities. Several experiments have shown that personal judgments as either positive or negative on some valence-free signs are decisively deter-

mined by the kind of approach – smooth or sharp – that contextually affects the individual. In the case of a series of movements shaped by smooth rhythm approaching the individual under observation, he/she performs a corresponding series of positive judgments on the signs he/she is looking at; whereas the pushing away of smooth movement rhythms determines a decreasing of positive valuing, the sharp movements revoke any effect of motor behavior on attitudes.

The research explains the influence these kinds of movement have on everyday life: while the individual affected by smooth movements can focus on something through a process of “body feedback” enabled by an indulging, relaxed state, once she is involved in sharp movements creating tension and a fighting condition, the individual, although she remains related to something, no longer experiences any meaning of it.

Precisely the role played in the formation of meaning shows to what extent such a dichotomy smooth/sharp rhythms intervenes in the interpersonal relationships, considering «that movement qualities (e.g. movement rhythms implemented via handshakes) may affect person perception in affect and judgment of personality characteristics».²⁷

The influence by the kind of motor stimulation on the formation of valuing is also verified in those experiments dealing with an off-line state of attitude. According to the experiments' findings, the participants put in the condition of light movements or light position of some parts of the body were led to perform a positive memory in comparison with the ones set in a condition of strong movements or strong position of some parts of the body.

In a further step, unifying the two sides of the experiments, i.e. the on-line and the off-line status of experience, Suitner and her co-authors insert the outcomes of quoted observations in the wider conceptual framework of the theory of “Spatial Agency Bias” (SAB). Such a theory concerns the systematic predisposition to describe events according to his/her own cultural way of writing, i.e. left-right, like in the West-

ern culture, or right-left, like for instance in Arabic one.

A number of tests demonstrated that the direction of writing causes a mental schema, which is valid for and spontaneously applied to the realm of action. Stereotypes according to which one judges an hypothetical occurrence in its development stem from the cultural mark of writing: in the examples proposed by the authors, an Italian or English style writer places the aggressor to the left and the victim to the right, or depicts a man (meant as a greater agency according to a masculine bias) as proceeding rightward from the participant's perspective.

The same observations showed that such a predisposed representations can disappear and even faintly upturn if the participants undergo a motor activity training opposite to their own. It proves both the bodily rootedness of the usual judging and meaning and the role played by the single situation for the emerging of the off-line embodied skills, considering that to be an embodied subject means living in and through a body as a *dynamic* reality immersed in social, cultural and historical surroundings.

The being situated of the body is emphasized as a basis of her reflections by Claudia Böger (*Metaphorical instruction and body memory*), who focuses the attention on the *medial* role played by the bodily layer between the corporeal-worldly dimension and the mental one.²⁸ Starting from this assumption, the author identifies in the nexus of the individual and the environment the source of the arising of meaningful experience, which has to be conceptually, i.e. metaphorically, translated «into concrete terms, which are grounded on the sensory-motor-system [...]. This means that embodied experiences in movements of the individual can build the basis of a learning process».²⁹ Recalling one of the guiding statements of the volume, Böger stresses in turn the dynamic structure of bodily dimension as the condition for developing an empirically informed theory of meaning.

The consideration of the body's inborn motility allows revolving the research around the

overlapping of language and experience. Referring to a series of tests, the author shows how the suggestion to tie a mechanical gesture (like tapping a castanet) to an empathic way to perform it (identifying with the click) helps the timing of the execution. Such an outcome proves the contextual frame of the subject's doing, who inserts her action in the environment meant as a location worth being exploited to better perform. Through orders stimulating the experiential feeling of subjective being-situated, the metaphorical way to instruct the participants improves their way of executing.³⁰

According to this perspective, the experience stands for the basic domain on which one can elaborate any further inquiries. To refer to the experience involves addressing its bodily level as the meeting point of language and meaning, both considered as *embodied* processes. The notion of "image schemata" intended as «the format (but not the content) for executing movement and articulating meaning», represents the medial locus for the formation of learning courses, since they are "cognitive patterns" able to be «modified during life, both perceptually in action and in simulation processes (in respect to imagined bodily action)».³¹

The recourse to the concept of the schema, differently criticized by both Summa and Sheets-Johnstone, has a positive validity in Böger, who means it not as a fixed structure of the mind nor as an abstract theoretical presupposition, but rather as a dynamic feature of an embodied subject dealing with an environment changing continuously.

Whereas Böger stresses the relevance of the relationship between bodily layer and worldly dimension, Christine Caldwell starts with the basic assumption of the unity of body-mind and the interconnection of different bodily systems: «all parts of the body form a network of mutual influence and interdependence, and together they produce the mind».³² The continuity of such interaction is well-proven in the phenomenon of body memory, both explicit (through words and images) and implicit (through engrams bodily enacted).

The two kinds of memory can emerge either singly or together following in both cases the fundamental principle of the association, according to which «if one sensory element of a memory is currently present, a whole network of associations will be called up along with it, and the new situation will be deemed a match to that memory».³³

Though similar as regards the associative process for coming out, explicit memory and implicit memory differ with respect to their characterizing hallmark: in the explicit course of remembering, time plays the crucial role of tracing the past events back until the current moment, while in the implicit procedure of memory the emotions allow both encoding and retrieving what has elapsed.

Developed according to a purely physiological process involving amygdala, hypothalamus, hippocampus, and basal forebrain, emotional memory occurs especially in an intensively lived experience and its recovering doesn't depend on a verbal retrieval of past situations, but rather on a psychotherapeutic setting able to act on the subject's affective states.

In this way, psychotherapy becomes a dimension, in which the patient learns to re-experience the past events which took place through her own body according to a process of «re-remembering or re-embodying memory», i.e. a memory re-living in light of the current therapeutic present the elapsed time.³⁴ In order to induce the process of bodily remembering, the therapist stimulates the patient to re-enact the right hemisphere, devoted to non-verbal experiencing, bypassing or postponing the left hemisphere dealing with language and with a timing that doesn't match with the often puzzled past of emotional life.³⁵

Through a gradual process of re-appropriation of her own bodily past, the patient is led to form new memories and to re-live them with a recovered awareness. It is about a re-shaping of herself and of her identity by a long and careful work addressed to the motor systems of the body *directly*.

All of the contributions discussed above share, firstly, thinking of body as a privileged

form of subjectivity, and secondly conceiving of formation of subjectivity as self-identity through memory. As this regard it is worth to bring up the brief though very instructive text by Ralf Meyer, who, from a purely neurobiological standpoint, offers a careful description of neural processes of remembering as aiming at forming the personal self.³⁶

Such a basic reference to the selfhood is mainly due to the philosophical setting of the volume as a whole, according to which the proposed approach, denoted by the editors in their *Conclusion* as both “transdisciplinary” and “interdisciplinary”,³⁷ though it promotes the integration with cognitive fields and clinical ambits, inscribes both domains in the broader conceptual framework of phenomenology.

Far from being a weak point of the study, this openly phenomenological background of analysis allows recognizing a clear clue that leads all contributions in the respect of their single differences, i.e. the notion of body memory meant as a part, though fundamental, for the more general issue, phenomenologically central, of the constitution of subjectivity.

For this reason, it can be useful and enlightening to compare and contrast the reflections worked out by Fuchs and his co-authors to the ones recently proposed in a volume edited by Shaun Gallagher that addresses the question of the *self* specifically.³⁸ The notion of the self, which underlies though sometimes not explicitly the analyses proposed by Fuchs and his co-authors, is the central issue of the rich volume proposed by Gallagher, who offered already in the recent past other contributions on such topic.

The richness of Gallagher's proposal is clearly shown by the diverse perspectives through which each author faces the notion of the self: phenomenological, metaphysical, neurological, clinical, social, moral, among related others. Gallagher himself, in his contribution written along with Kai Vogeley, approaches the subject matter putting it within a neuroscientific framework.³⁹

What does it mean to refer to neuroscience's observations in order to talk about the

self? Evidently, one must not look for the self, as if the self were something located in a specific area of the brain. Rather, the search for the self in the brain means identifying both those areas and the processes of the brain, in which something like a “sense of the self” emerges; it is about all of the mental states such as “thinking of”, “being aware of”, “feeling” one-self. Quoting the most recent findings in the fields of neuroimaging and neurophysiology, the authors highlight the central role played by the cortical midline structures (CMS) and especially by the ventromedial prefrontal cortex in developing self-experiences.

The extensive nature of the CSM, on the other hand, indicates that there is no specialized area apt to form a sense of the self, but rather that such a sense can stem from different parts of the brain performing in different ways the same function (right hemisphere, left hemisphere, anterior cingulate cortex, among others). The fact that these numerous areas of the brain appear to be involved in the processes of self-representation doesn't entail that the sense of the self is tied only to experiences of self-reference.

Several times the same areas implicated in the self-experiencing get going referring not to the self, but to the other, to objects and even to purely logical mental reasoning. This means that these areas «are in fact not areas of activation exclusively for self. At first it seemed the self was almost everywhere in the brain; now it seems to be nowhere».⁴⁰

To escape from this impasse, Vogeley and Gallagher propose to consider the neuroscientific findings on the basis of a *phenomenological* assumption, according to which one can distinguish between a “sense of ownership” and a “sense of agency” both relating to the notion of “minimal self”. Such a notion describes the primal, immediate sense of the self, i.e. the one bound to the bodily dimension of experience.

As the pre-reflective, implicit layer of self-experience, this minimal sense of subjectivity emerges not in the dimension of narration or self-construction, which is an extended shape of the minimal one, but rather in the direct feel-

ing (ownership) of our own body meant as moving, suffering, enjoying body, and in the related sensation of oneself as the one who is acting (agency).

On the basis of these primitive and pre-rational senses of self the upper level of narrative self (reporting on his/her owning and acting) develops. It is worth stressing that the *phenomenological* assumption regarding the self intertwines with the notion of *bodily* self and in this way it openly recalls, though without quoting it, the *phenomenology of the body* proposed by Fuchs and his colleagues.

Basing the inquiry on neuroscientific tests doesn't guarantee a complete correspondence between theoretical statements and empirical outcomes. On the contrary, the experimental sides of inquiry sometimes seems to contradict or at least to put in question the conceptual insights. It is precisely what happens to the authors as regards the observations put forward by Farrer and Frith, to which they clearly refer for the notions of sense of ownership and sense of agency. The latter especially becomes questionable if meant as a sense of acting simultaneous to the action: according to the studies by Farrer and Frith, it looks like this sense emerges not during the realization of the act, i.e. it is not tied to motor control, but rather to what is achieved by the action, i.e. to its consequence.

Once recognized such a mismatch between their theoretical insights and the research's results they themselves refer to, Vogeley and Gallagher transform this critical point of inquiry into a stimulus to probe the agency of the self more deeply towards «a multifactorial and multilevel model [that] appears to provide the most helpful and comprehensible framework for integrating divergent theories and findings».⁴¹

In order to build this multilayer model of the self, the authors shift the attention from the sole internal states to the ecological dimension of self-experience. In this way, the inquiry focuses on the spatiality and the sociality of the self, which constitute a field of observation able to show the continuous interaction between the first person perspective and the third person

perspective along with the involvement from time to time of different areas of the brain. The openness to the world as a network of relationships allows conceiving the self as a subject of multiple experiences rebounding on the cerebral features of the individual.

According to this perspective, one should study «what happens in the brain when the self-as-subject is engaged in the world, in specific actions and in specific social contexts»,⁴² based on an interpretation that, though grounded on the sharpest neurophysiological experiments, doesn't renounce putting such results in a wider conceptual, i.e. philosophical, framework.

The bodily dimension of selfhood from a phenomenological standpoint is proposed by Dorothée Legrand, who opens her contribution talking about the distinction between “self-as-object” and “self-as-subject” Gallagher and Voegey dealt with.⁴³ The self-as-subject is that part of experience that cannot be eliminated, i.e. merely objectified, and that is always consciously lived.

Such assumptions lead to the statement that subjectivity expresses herself through intentionality, though the subject is not reducible to her intentional traits considering the possible intransitive states of the subject (an action without reference to an object). This *double* level of differentiation/relation between subjective and intentional sides of *one and the same* experience presents the difficulty to justify the emergence of a *coherent* experiencing, in which the subject constitutes as intentional and at the same time is *constituted* as intentional. Legrand finds in the body the existential dimension of the self able to address the Husserlian paradox of subjectivity as both a subject for and an object in the world.

The way to make clear such a paradox goes through the body considering that the corporeal being of individual means *as such* his/her worldly being. Referring to prominent scholars who emphasized the bodily nature of living in conjunction with its worldly nature, such as de Biran, Sartre, Merleau-Ponty, and Henry, the author aims at overcoming the idea of a body

as a pattern of the world; it would involve putting the body and world on two separate though interconnected levels, according to a schema in which the body experiences the world by a mediating contact.

On the contrary, Legrand proposes to read the relation body-world as co-happening, since both body and world, at the level of consciousness' experience, «belong to one and a single act of consciousness, constituted by two irreducible but inseparable modes of givenness (the bodily subjectivity and the intentionality of experience)».⁴⁴ The notion allowing to bring together the subjective and the intentional forms of experiencing is the one of body as a “volume”, i.e. as an entity present in the world that, given its localized and oriented nature, permits the subject to relate to the environment.

It is about a very peculiar *medium*: it is a reality constitutively rooted in the world and at the same time it hosts a network of mental processes. As such, the body allows the subject to experience the world without becoming a visible part of this experience; the body remains «transparent in the sense that one experiences the world *through* it».⁴⁵ Its trait of voluminosity, i.e. being a conscious though not directly objectified presence, makes the body something different than the Husserlian *zero-point of orientation*, since «I experience this volume as oriented subjectively by an act of consciousness [...]» though «[...] I experience this subjective orientation without taking it as an intentional object of my experience».⁴⁶

In this perspective, being directed towards the outer world doesn't involve the unawareness of oneself as experiencer, but I become conscious of my-self as subject of experiencing precisely thanks to this transparent bodily condition of such an experiencing.

Therefore, *being conscious* of something doesn't mean making it an object, but *living through* it objectifying something else. “Over and above” this dimension of transparency, Legrand puts the sensations lived *directly by* the body, like touching, in which the immediacy and closeness of such an experience reveals to

us our being a subject. Because of its emerging in contact both with itself and with the external world, the feeling of touching entails the idea of the body as physical and therefore it adds to the sense of the self a sense of the space.

Though its intimacy and self-relatedness, the experience of bodily sensations is based on the transparency of the body (for this reason Legrand defines the bodily feeling as “opaque”), since having experience of oneself as bodily presupposes having *already* oneself as voluminous, localized, and oriented body.

While both Gallagher and Vogeley and Legrand stress the egoic dimension of living differently related to one of its fundamental aspects (neurological, social, bodily), Galen Strawson proposes an idea of the self freed from any other characterization except for its being the center of experience: «strip away in thought everything other than the being of this experience. When you do this, the subject remains». ⁴⁷ Basing upon such essential assumption, the author goes on, according to his usually bright and fast pace of reasoning, to better describe this minimal subject as both a substance – meant as a thing or object, i.e. something existing – and a physical entity – intended as something existing in a concrete field of experience. ⁴⁸

This recalling to the concreteness of reality involves tying the subject to its experiencing and it entails in turn identifying the subject with its experience, according to a perspective that accepts the “venerable tradition” of subject-object structure without leading to any metaphysical (the experienced exists outside the subject), ontological (the experiencer differs from the content of experience), or phenomenological (the experiencer experiences such a structure) consequence.

This close connection between subject and experience requires that the existence of the latter is the condition of the existence of the former, according to a “thin inner conception” of the experiencing subject, which doesn’t conceive of a subject that isn’t *actually* dealing with an experience.

Following his reasoning developed in easy

stages, Strawson states that the correlation between subject and experience is based upon the medial term of temporality, in which the subject’s experiencing goes on; given that «nothing can exist only at an instant», ⁴⁹ this lapse of time has a minimal length, though it is not relevant to determine it exactly. In the same way, it is not of primary importance to identify a specific area of the brain devoted to experience, once we assumed that a “neural synergy” performs something like experiencing.

Because of their common location in the brain, one has to affirm the substantial identity or, at least, the overlapping between subject and experience. In his conclusion, facing the insidious objection of considering the non-experiential being as a part of the experiential processes, Strawson reasserts that the proposed materialist notion of experience, considering its thinness, i.e. its “singleness”, excludes any dimension of non-experience as well as any lack of a subject of experience.

The notion of the Self proposed by Strawson is partially resumed by John Campbell, ⁵⁰ who deals with the challenge of defining the self as the same person, a difficulty paradoxically linked to the simplicity of the concept of “I” itself. Strictly connected to the first *person* perspective, which constitutes the natural background of any egological statements, the use of “I” is always accompanied by several familiar predicates, such as the psychological ones, that make the “I-judgement” immune to error through misidentification.

As a consequence, Campbell states: «there is no rational basis on which I could hold fast to my right to the claim that there is pain, but question only whether it is I who has it». ⁵¹ Nevertheless, given its autonomy of meaning, the notion of the “I” has no fixed term one can refer to but itself. Therefore, considering the complex mechanism underlying the individual’s life at the physical level, it becomes difficult, though necessary, to tie such a mechanism to the simple I-dimension.

The problematic outcome of this reflection can lead to the opportunity of denying both the first person perspective and even the existence

of something like the self. While the latter possibility assumes the shape of a no-self theory of consciousness,⁵² the former one is proposed by Derek Parfit, explicitly recalled by Campbell himself in the conclusion of his essay, who clearly criticizes the legitimacy itself of assuming the sameness as a fundamental trait of a person.⁵³

Dealing with examples regarding extreme-situations – even too radical – of individuation of identity such as the replacement of some proportion of the body (teletransportation) or the implant of her own brain onto the rest of the brother's body, Parfit aims to show how the emphasis put on the personal uniqueness is merely verbal, since it is based on the consideration of what has to matter according to a theoretical standpoint without referring to what is really happening. By reducing the importance attributed to the identity or, yet better, to the *linguistic* accent of identity, the author suggests to shift the attention from the word-level to the fact-level, in which what matters is not what we can think of it, but rather what we can really consider with regard to it.

To save the sense of identity it is then not necessary to aspire to conservation of the same "I" over the time, but to expect more modestly a partially coincidence of experiences and thoughts of the present "I" also in a future, even other, "I". «What matters isn't that there will be someone alive who will be me. It is rather that there will be at least one living person who will be psychologically continuous with me as I am now, and/or who has enough of my brain».⁵⁴

According to Parfit, the functioning of the brain is enough to talk about identity, without the need to appeal to an immaterial/Cartesian Ego nor to a bodily "I" persisting over time. As to the body, in particular, considering the nervous system as its basic expression, one can put the craved sameness in the brain only, since «the brain is so important that its survival counts as the survival of this human being».⁵⁵ According to this openly reductive perspective, in the imagined case of the head grafted onto another's body, she can be sure to maintain her

own identity, because she limits herself to observe what's going to happen without any verbal conceptualization on what should be happen. By doing so, the identity is recognized at a minimal level and as such it doesn't assume the primary importance, since it is, as it were, overcome by the facts.

Though one has to recognize the rigorousness and the force of the argument proposed by Parfit, especially considering his recall to the neurophysiological basis of consciousness' life, one should take into account not only the philosophical implications of such reflections, but also and, maybe, above all, its *ethical* repercussions. Campbell does it, as he, at the end of his contribution, observes: «ascriptions of psychological states involving the first person have often been thought to be essential to the *explanation of action*. [...] The *impersonal* thoughts seem to give no particular reason to *feel responsible* for what is happening».⁵⁶

Thinking of a series of neural processes without any subjective center, to which one might ascribe or even impute actions, implies putting into question the nucleus of any ethical philosophy, i.e. the notion of person⁵⁷. There would be no longer a personal identity (it is no longer important, in Parfit's words), but rather an identity as a physical process. How is it possible, then, to recognize such an identity as *mine*, if I cannot talk of *me* as "I"? According to this perspective, what does the mineness of identity mean? Should we talk about identity as sameness without any reference to *who* the bearer of such sameness is?

These and similar issues emerge in what Jennifer Radden calls the "post-Parfit era", in which any attempt to build a theory of the self aims at avoiding «earlier traditions attributing identity to the continuity of phenomenological states».⁵⁸ Given that this continuity over the time is a neural one, we no longer need a subject of this continuous proceeding, which goes on *autonomously*. Nevertheless, the complex structure of such a process allows trying to think of other levels of experience besides the mere neural one.

According to Radden, a possibility in this

sense is offered by the case of separate identities dwelling in the same body. The reference to the body, as it is already shown by the essays in Fuch's volume, shifts the attention from a simply theoretical idea of the self to the consideration of the *praxis* the body is an expression of. Like Radden states, «embodiment is required for the sense of identity and personhood in which we reflect about what we intend to do, and then to act. The body is required for 'practical identity', oneself understood as a *doer*». ⁵⁹

Radden quotes two distinct approaches to the issue of attributing coexisting multiple selves: the one by Stephen Braude, who proposes to read the multiplicity of identity as the incapability of distinguishing the claims that are indexical and autobiographical from the ones that aren't (one is not able to differ her own apperceptive centers from the ones belonging to – imaginative – others); and the second approach by Carol Rovane, who elaborates a weaker sense of multiplicity of the selves that permits the co-existence of selves meant as "sub-selves" both conscious at the same time in the same body.

Radden presents her own position as closer to Braude's, since she also aims at explaining the multiplicity in terms of lack of unity by the individual with regard to his/her coexisting experiences. By referring some clinical cases, which deal with individuals who experience differently a dissociation of personality, Radden shows the importance of defining the limits of a pathological multiplicity. Contrary to Rovane, who stresses the ideal function of self-unity, Radden emphasizes the rational and especially *cultural* convenience⁶⁰ for aligning the coherent and uniform self with the healthy state, according to a perspective that sees the co-existence of *some* psychic heterogeneity as normal and even desirable, provided that they don't become the *main* trait of personality. In such a view, which aims at being a not merely metaphysical reply to the skepticism about the idea of the self, «self-unity and singularities are preconditions for other valued qualities, traits, and practices». ⁶¹

If Radden invites a search for the legitimacy of conceiving the self in a broader context than

the personal, subjective one, Leonard Lawlor suggests re-thinking the notion of the self starting by overcoming the longing for identity as a basic trait of selfhood.⁶² Openly referring to the theses worked out by Lyotard and successively recovered by Deleuze, Guattari, and Derrida, Lawlor highlights the bond tying the self and time, which doesn't allow considering the identity as the constitutive hallmark of the self, like the Platonic tradition based on an atemporal notion of transcendence requests: «because the self is conditioned by time, these philosophers [the postmodernists] argue that the self is always differentiated into past and future. In other words, the experience of time shows that self-experience does not originate with an identical self and it does not end with an identical self. [...] Instead of identity, I find, inside of myself, difference». ⁶³

Given that the individual as a self can't aspire to a metaphysical unity, philosophy has to seek such a unity in a supra-condition of person, i.e. the political one. Only within a social reality capable to develop a non-totalitarian "we", different from the totalitarian "we" of the techno-scientific capitalism, it becomes possible to preserve a singularity.

The way to the politics passes through two very significant authors of philosophy of time (and subjectivity), namely Husserl and Bergson. Both thinkers, though from diverse standpoints, developed a concept of temporality that makes time a *medial* structure of mental life, which, as absolute, i.e. foundational, determines the essence itself of the subject meant as a reality constantly undergoing an internal differentiation. As such, time "consists in a link that disjoins as it joins"⁶⁴ and, by doing so, it reveals both its heterogenizing nature and the self's heterogeneous feature.

It allows escaping from the Platonic perspective, at the price of entering into an aporetic dimension, in which the singularity of the now – the present – co-exists with the continuation of the flowing – from the past to the future. The aporia consists in the fact that the present moment, in which according to the classic idea one should find the coincidence, i.e.

the identity, of the self with his/herself, «comes second; it is always involved in a process of mediation»⁶⁵ between elapsed and upcoming moments. It implies that, if one recognizes in the interior monologue the site of self-identification (“hearing oneself speak”, in Lawlor’s definition of Kantian autonomy), one has to admit that such a monologue is basically characterized by a multi-vocality, since the moment in which I *guess* to hear myself speaking is *actually* a response to a context surrounding and transcending me. Precisely because my present speaking occurs within a process *already* – temporally - developing.

The recognition of the fact that «my present moment is never immediate, my interior monologue is never my own»⁶⁶ entails the passage to an over-subjective level of self-constitution, in which the social trait of narration plays a crucial role.⁶⁷ The techno-scientific capitalism stood out as a global narrative event able to trace any individual formation back to the economic rules of gaining time – i.e. gaining capital. As such, capitalism bears the totalitarian traits of “power” and “hyperchronism” that don’t allow developing independent singularities.

Without recurring to a reply built on a solid and hard subjectivity, which would reproduce the Platonic idea of identical – as atemporal – self, the postmodernist thought suggests highlighting the two marks characterizing the temporal self: the “anachronism”, meant as the impossibility to resolve in a fixed unity the aporia of the fleeting present, and the “powerlessness”, intended as the incapability of not undergoing this aporetic condition. The same unstable essence of selfhood allows elaborating a non-totalitarian response to the totalitarian domain of our lives: being aware of oneself as subject *to* time – instead of subject *of* time – entails forgoing the mastering of first the temporality of existence and then of the singularities existing through temporality.

Contrary to the capitalist techno-science – the ruling narration – postmodernist selves aim at building people bound by reciprocal recognition of weak condition: «this would be a peo-

ple who does the least violence to singularities because it is unified around powerlessness».⁶⁸ As non-identical and always under construction, the self, once an obstacle, becomes «a spur of thinking», and as such it allows philosophy to write ever more lying in a dimension of constant passage.

Both the volume written by Fuchs and co-authors and the one edited by Gallagher, given their basic differences mainly due to diverse starting setting (a general phenomenological background adopted in Fuchs’ study, a multiplicity of approaches proposed by Gallagher’s book), share the need to make clearer an issue philosophy in its history dealt with in various ways: what does subjectivity look like?

While Fuchs and his collaborators offer a solid reference point for answering, i.e. the body and its complex developing, Gallagher aimed at presenting many aspects of the issue, and in this way he is able to show that for any positive account philosophy can propose a counter-story can be suggested. In this sense, the skeptical contributions put forth by Gallagher – skeptical as regards the issue of subjectivity, and not as to the knowledge – play the fundamental role always played by Skepticism throughout the history of thought: to not rest on gained outcomes, but to move forth reasoning and searching (σκέψις) further. The volume by Fuchs and co-authors is a very good example of such a search as well as various essays presented by Gallagher aiming to make the issue of the self ever more understandable and rigorous.

Notes

¹ S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, John Benjamins, Amsterdam 2012.

² T. FUCHS, *The Phenomenology of Body Memory*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 9-22.

³ *Ivi*, p. 10.

⁴ *Ivi*, p. 11.

⁵ M. SUMMA, *Body Memory and the Genesis of Meaning*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and*

Movement, cit., pp. 23-42.

⁶ *Ivi*, p. 25.

⁷ *Ivi*, p. 29.

⁸ *Ivi*, p. 32.

⁹ *Ivi*, pp. 35; 36.

¹⁰ M. SHEETS-JOHNSTONE, *Kinesthetic Memory: Further Critical Reflections and Constructive Analyses*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 43-72.

¹¹ *Ivi*, pp. 45-46.

¹² *Ivi*, p. 64.

¹³ E. BEHNKE, *Enduring: A Phenomenological Investigation*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 83-104.

¹⁴ *Ivi*, p. 87.

¹⁵ *Ivi*, p. 91.

¹⁶ *Ivi*, p. 93.

¹⁷ In the field of phenomenological psychiatry, Roland Kuhn describes depression as the incapability to carry out his/her own future, i.e. to reach what one strives for; who suffers under depression lacks the «capacité d'accomplir des protensions», due to the constant falling again into their own past, for they «retombent toujours à nouveau dans des contenus rétentionnels». See R. KUHN, *Forme mythique et analyse de l'existence*, in: R. KUHN, *Ecrits sur l'analyse existentielle*, éd. par J.-C. MARCEAU, L'Harmattan, Paris 2007, p. 269.

¹⁸ C. BERMEITINGER, M. KIEFER, *Embodied Concepts*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 121-140.

¹⁹ *Ivi*, p. 125.

²⁰ M. WILSON, *Six Views of Embodied Cognition*, in: «*Psychonomic Bulletin & Review*», vol. IX, n. 4, 2002, pp. 625-636.

²¹ C. BERMEITINGER, M. KIEFER, *Embodied Concepts*, cit., p. 131.

²² C. JUNG, P. SPARENBERG, *Cognitive Perspectives on Embodiement*, in: S.C. Koch, T. Fuchs, M. Summa, C. Müller (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 141-154.

²³ *Ivi*, p. 145.

²⁴ *Ivi*, p. 149.

²⁵ C. SUITNER, S.C. KOCH, K. BACHMEIER, A. MAASS, *Dynamic Embodiement and its Functional Role: A Body Feedback Perspective*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 155-170.

²⁶ *Ivi*, p. 155.

²⁷ *Ivi*, p. 161.

²⁸ C. BÖGER, *Metaphorical Instruction and Body Memory*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 187-200. Heidrun Panhofer and co-authors in their contribution define the bodily experience as a “bridge” between experience and language. See H. PANHOFER, H. PAYNE, T. PARKE, B. MEEKUMS, *The Embodied Word*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 307-326, here p. 320.

²⁹ C. SUITNER, S.C. KOCH, K. BACHMEIER, A. MAASS, *Dynamic Embodiement and its Functional Role: A Body Feedback Perspective*, cit., p. 188.

³⁰ For a more detailed, experiments-referred description of the role of the metaphor see A. KOLTER, S.H. LADEWIG, M. SUMMA, C. MÜLLER, S.C. KOCH, T. FUCHS, *Body Memory and the Emergence of Metaphor*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 201-226. The authors stress the relevance of bodily symbolizing both on the level of theoretical explications and in the ambit of therapeutic praxis, according to the tested principle that often «meaning is first expressed through movement, and only subsequently verbalized» (*ivi*, p. 220).

³¹ C. SUITNER, S.C. KOCH, K. BACHMEIER, A. MAASS, *Dynamic Embodiement and its Functional Role: A Body Feedback Perspective*, cit., pp. 194; 195.

³² C. CALDWELL, *Sensation, Movement, and Emotion: Explicit Procedures for Implicit Memories*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 255-266, here p. 255.

³³ *Ivi*, p. 258.

³⁴ Päivi Pylvänäinen stresses in turn the relevance of the relationship between healing and the bodily re-enacting of memories referring to the experience of clinical dance/movement therapy. The importance of dance therapy for the re-activation of bodily stored memories is highlighted also in other contributions of the third section of the volume dealing precisely with the ambit of embodied therapies. See P. PYLVÄNÄINEN, *Body Memory as a Part of the Body Image*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 289-306.

³⁵ A similar emphasis on body expression as alternative to verbal communication can be found in

H. PANHOFFER, H. PAYNE, T. PARKE, B. MEEKUMS, *The Embodied Word*, cit.

³⁶ R.P. MEYER, *The Memory of the Cell*, in: S.C. KOCH, T. FUCHS, M. SUMMA, C. MÜLLER (eds.), *Body Memory, Metaphor, and Movement*, cit., pp. 243-252.

³⁷ *Ivi*, p. 439.

³⁸ S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, Oxford University Press, New York 2011.

³⁹ K. VOGELY, S. GALLAGHER, *Self in the Brain*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 111-137.

⁴⁰ *Ivi*, p. 118.

⁴¹ *Ivi*, p. 123.

⁴² *Ivi*, p. 130.

⁴³ D. LEGRAND, *Phenomenological Dimensions of Bodily Self-Consciousness*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 204-227.

⁴⁴ *Ivi*, p. 212.

⁴⁵ *Ivi*, p. 215.

⁴⁶ *Ivi*, p. 217.

⁴⁷ G. STRAWSON, *The Minimal Subject*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 253-278, here p. 253.

⁴⁸ For this reason, I use with regard to Strawson's notion of the self both the neutral pronoun "it" and neutral possessive adjective "its", also considering the closing words by Strawson himself: «we shouldn't, though, deny that there's a sense in which we're human beings, things that last considerably longer than the living moment of experience, and have many properties that can't be ascribed to minimal subjects». (*ivi*, p. 276).

⁴⁹ *Ivi*, p. 266.

⁵⁰ J. CAMPBELL, *Personal Identity*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 339-351. Dan Zahavi recovers Strawson's notion of the minimal self set in a more clearly phenomenological framework stressing the "pre-reflective" sense of self (see D. ZAHAVI, *Unity of Consciousness and the Problem of Self*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 316-337).

⁵¹ *Ivi*, p. 346.

⁵² Such a non-egological perspective is differently suggested in T. METZINGER, *The No-Self Alternative*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 279-298; M. SIDERITS, *Buddhist Non-Self: No Owner's Manual*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*,

cit., pp. 296-315.

⁵³ D. PARFIT, *The Unimportance of Identity*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 419-441.

⁵⁴ *Ivi*, p. 440.

⁵⁵ *Ivi*, p. 436.

⁵⁶ *Ivi*, pp. 350; 351 – emphasis added.

⁵⁷ As to the imputation, I am referring to Kant's notion of "empirically unconditioned" causality of reason, according to which the «blame is grounded on the law of reason, which regards reason as a cause that, regardless of all the empirical conditions just named, could have and ought to have determined the conduct of the person to be other than it is. [...]; the action is ascribed to the agent's intelligible character: now, in the moment when he lies, it is entirely his fault; hence reason, regardless of all empirical conditions of the deed, is fully free, and this deed is to be attributed entirely to its failure to act». I. KANT, *Critique of Pure Reason*, trans. P. GUYER, A.W. WOOD, Cambridge University Press, Cambridge 1998, p. 544.

⁵⁸ J. RADDEN, *Multiple Selves*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 547-570, here p. 548.

⁵⁹ *Ivi*, p. 549.

⁶⁰ The social and political context of the formation of the notion of self is emphasized in K.J. GERGEN, *The Social Construction of Self*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 633-653; L. CODE, *The Instituted Social Imaginary*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 715-738.

⁶¹ J. RADDEN, *Multiple Selves*, cit., p. 567.

⁶² L. LAWLOR, *The Postmodern Self: An Essay on Anachronism and Powerlessness*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 696-714.

⁶³ *Ivi*, p. 697.

⁶⁴ *Ivi*, p. 701.

⁶⁵ *Ivi*, p. 704.

⁶⁶ *Ivi*, pp. 704-705.

⁶⁷ The narrative dimension of self-constitution is analyzed in detail in H.J.M. HERMANS, *The Dialogical Self: A Process of Positioning in Space and Time*, in: S. GALLAGHER (ed.), *The Oxford Handbook of the Self*, cit., pp. 654-680.

⁶⁸ L. LAWLOR, *The Postmodern Self: An Essay on Anachronism and Powerlessness*, cit., p. 711.