

Embodied Self Reconsidered

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Abstract: The problem of mind and self embodiment has become a hot topic in contemporary consciousness studies. Emphasis on the bodily background of our thoughts, images and feelings, however, is rich in misunderstandings about the very nature of the studied phenomena. In the present paper I intend to reveal the most persisting confusions on reality and the explanation of the self. My aim is to rethink the thesis on embodied cognition and especially embodied self, based on the analysis of recently debated naturalist-reductionist and naturalist-antireductionist perspectives. The former approach is represented by the philosophical conceptions of D. Dennett and T. Metzinger, the latter by philosophers of mind and phenomenologists such as G. Strawson, F. Varela, D. Zahavi. I will also point out the important consequences for the study of the self that stem from the conception of the cognitive linguists G. Lakoff and M. Johnson. Talking about the self and conscious experience, scholars seem to talk about the same or at least a similar phenomenon. Although the great number of inconsistencies that characterize the way which philosophers approach the notion or subject-matter of the self, reality is yet much more different. Confusions come not only from using the same notions with different meanings, but also from the insistence on contradicting the starting points and aims of the inquiry. My argument is inspired by the outcomes of experimental research in cognitive neuroscience, case studies in psychiatry as well as theoretical research in philosophy of mind and language.

Keywords: embodiment; phenomenology; metaphor; self; illusion.

Introduction

In our everyday experience and language, feelings, thoughts and sorrows are experienced as “something” that we own but may partially lose. Language about our “inner life” is largely metaphorical: “love is a journey”, “their marriage became a nightmare”, “he is out of his mind”, “she’s her own worst enemy”, “he nursed himself back to health”, “if I were you, I’d hate me”, “you are the light in my life”, “she is my better half”, “he is wasting my time”, “I can’t follow you”, “I see what you’re saying” etc. Philosophers’ temptation to turn thoughts, feelings or desires into mental entities, processes, events has a long

tradition in the history of philosophy. Ludwig Wittgenstein¹ (1953) repeatedly pointed out the confusions due to such desire. One of the greatest misunderstandings affected the philosophical problem of the nature of human mind and consciousness. False analogies between physical-mental, and physicalist language-mentalist language lead to the idea of the self as a separate person (entity) inhabiting a special ontological realm with its own functions of willing, perceiving or planning. Philosophers' "bewitchment by language" resulted also in imposing ontological constraints on everyday language. The status and the function of the principles and generalizations that underlie our everyday behavior have become a deep theoretical problem known as the problem of the nature of *folk psychology*.²

In the following pages I intend to analyze questions related to the recent debate on the nature of human self and consciousness. I will focus on persistent conceptual and methodological confusions that can have deep theoretical implications for further considerations on conscious states.

What is the explanandum?

What is a self? What is the relation between phenomenal consciousness and the self? In what sense can the "self" be a real object in the world? What are we talking about when we talk about conscious experience, self, inner mental world? What is the basic structure, the basic conceptual framework of self-experience? Does the self have an experiential reality or is it nothing else but a theoretical fiction? Is there any use of the self in our conscious lives? Is consciousness a metaphor? Difficulties in answering these persisting questions are

¹ "While I was speaking to him I did not know what was going on in his head'. In saying this, one is not thinking of brain processes, but of thought-processes. The picture should be taken seriously. We should really like to see inside his head. And yet we only mean what elsewhere we should mean by saying: we should like to know what he is thinking. I want to say: we have this vivid picture – and that use, apparently contradicting the picture, which expresses the psychical" (Wittgenstein 1953: 427).

² In the philosophy of mind and the cognitive science the problem of folk psychology has been formulated in such questions as for example: Is folk psychology – a commonsense framework we use for understanding other people – a theory? If, yes, is it a plausible theory in explaining human behavior? If not, what level of credence is it given in our everyday experience? P. Churchland considered everyday language as a theory and even a bad theory indeed. That is why he proposed to eliminate language along with those "entities" it was supposed to refer to. According to D. Dennett folk psychology has a more pragmatic status than that of a theory. He argues that, based on the adoption an intentional stance towards the others, folk psychology is a useful tool in explaining and predicting behaviors. Something similar is stated by K. Wilkes in her book *Real People* (1988). In my opinion folk psychology is not a theory, but a set of generalizations based on our experiential practice and expectations. Even if, as it seems, it works pretty well, it requires corrections based on the outcomes of empirical science.

closely related to a “terminological fog” spreading over the studies about mind and consciousness. In approaching the phenomena of our conscious life, however, scholars seem to agree upon the following issues:

- mind and self are embodied, a picture of disembodied reason, self, consciousness existing independently from bodily structures is either a category mistake or a myth, or both
- mind-body dualism has no explanatory force in contemporary studies about the nature of human experience: cognition is both embodied and embedded – people live and act in the world as cognitive agents
- the reality of the self has its origin in the inner experience that we have of ourselves
- experimental and clinical outcomes are highly relevant for the study of the phenomena of the self and the consciousness

At first sight the followers of several “isms” approach the self and the conscious states as natural phenomena available for scientific research and explanation. So, it seems that there is not any significant problem concerning the existence of the self *in* the surrounding world. Actually, the situation is much more different, especially because of philosophers’ conflicting proposals and models. The main issues of disagreement concern the question of the starting point and the related ontological constraints, aims of the inquiry and the employed methods. Let us consider the question of the starting point. Apparently unproblematic statements on the existence of inner experience and self in our everyday experience gradually vanish, when we compare two fundamental perspectives towards reality: the *naturalistic* and the *phenomenological* attitude. The former attitude assumes the existence of the natural world, the objective physical space-time. Within this frame, there are living beings whose conscious experiences result from their evolution by natural selection. The starting point of the naturalistic philosophy of mind is that the natural world and physical time precede conscious experiential phenomena, which are considered as a part of the physical world. Consciousness and the self, being considered as phenomena, “objects” in the natural world, are approached from the third-person perspective. The naturalistic attitude is clearly one of the fundamental as well as successful strategies developed by empirical science.

As a representative of a phenomenological attitude, Francesco Varela claims that: “The phenomenological approach starts from the *irreducible* nature of conscious experience. Lived experience is where we start from and where we all must link back to, like a guiding thread” (Varela 1996: 6). According to Varela, foundational project of phenomenology is the re-discovery of the primacy

of human experience and its direct, lived quality. Within the phenomenological approach, the method of reduction is taken as a necessary starting point. This method has also been defined on the basis of its analogies with doubt: a sudden, transient suspension of beliefs about what a being is. “To engage in reduction is to cultivate a systematic capacity for reflection on the spot, and thus opening new possibilities within our habitual mind stream [...]” (Varela 1996: 11). Such an increase of intimacy with the phenomenon is crucial, since it is the basis of the criteria of truth of the phenomenological analysis, the nature of its evidence. Intimacy or immediacy are followed by development of imaginary *variations*, by considering in the virtual space of mind multiple possibilities of the phenomenon such as it appears. F. Varela defined his philosophical account – *neurophenomenology* – supposing that it would link the phenomenal domain with the empirical observations of neuronal activity. The word phenomenal is an explicit term *directly* linked to experience through a rigorous examination based on reduction, invariance and intersubjective communication (Varela 1996: 21). Although he emphasizes the mutual constraints between phenomenology and cognitive science, Varela admits an important difference in the use of the method of *reduction*.³ On the one hand, *phenomenological reduction* (followed by “eidetic” and “transcendental” reduction), based on “bracketing” the world of everyday experience, seems to be right at the beginning of the inquiry. On the other hand, in empirical sciences the *theoretical reduction* is carried out during the process in which research hypotheses are testified. In traditional terms, it aims at reducing complex interactions and entities to the sum of their constituent parts, in order to make them easier to study. A possible outcome of scientific reductionist strategy – *ontological reduction* – arises at the end of the investigation or may not come at all. The proposed method of study is strictly connected with the aims and the expected outcomes of the inquiry as a whole. As we see in the history of science, the main aim of science primarily consists in explaining the studied phenomenon, solving research problems, testing and, at least in principle, making predictions.

According to the phenomenological perspective, answering a question about the nature of the self requires an examination of the structure of experience. The self possesses experiential reality which means that it is linked to the first-

³ In the present text I leave out of consideration the complexity of philosophers’ disagreement on types and aims of reduction. Among the several forms of reductionism I consider theoretical reduction as synonymous of the methodological reduction – an attempt to study smaller spatial scales or organizational units. I am not dealing here with the open question whether this kind of reduction provides an *explanation* of the smallest possible entities. This notwithstanding, I admit that investigating in what reductionism and reduction consist is necessary to determine how a reductionist approach can be reconciled with a plausible explanation of conscious experience.

person perspective or first-person *givenness* of experiential phenomena (Zahavi 2005: 106). The self is not an ineffable transcendental precondition or a mere social or narrative construct, it is rather an integral part of our conscious life provided with an immediate experiential reality. The aim of a phenomenological analysis is to describe and explain experiential structures or more precisely the fundamental structural principle which, like space, moulds the nature of what is given to us as content of that experience. Zahavi as well as other philosophers of different perspectives have agreed on the fact that the richness and complexity of conscious phenomena require an interdisciplinary approach in studying and explaining their nature. While presupposing coexistence and mutual inspiration of phenomenological and naturalistic attitudes, it is worth reconsidering new aspects of communication for the study and an explanation of conscious phenomena. Given the first-person phenomenal character of one's own subjective life, its uniqueness and unrepeatability, startling questions reappear: How to study conscious experience scientifically? Does a third-person objective perspective of empirical science make the *felt* experiences credible? The search for relevant methods of study has become an ongoing process for theorists and scientists working in different fields and disciplines. Phenomenologists appeal to phenomenological method as of great contribution to the scientific study of mind.⁴ Pace Edmund Husserl, more attention has been focused on the *things that are experienced* and to the several structures of experience, in order to understand experience according to the meaning that it has for the subject. Phenomenology thus aims at a careful description of experiential structures related to the world in which the experiencer is situated. Far from staying at a pure subjectivist level, phenomenologist goes beyond, by describing "what it is likeness" in experience at a higher level of understanding, and by describing the experiential structure of person's embodied life. If a phenomenological account is relevant to the science of mind and consciousness, it should nevertheless base its inquiry at least on common working characteristics of the studied phenomenon and aims of investigation. As far as the phenomenon of conscious experience is concerned, it is not clear at all whether phenomenology and cognitive science study the same phenomenon. A significant matter of discussion is strictly related to the status and function of the concept of self (consciousness) which will be analyzed in the following text.

⁴ The relevance of phenomenological resources is demonstrated in the study of psychiatric disorders where the principal aim of phenomenological investigation is the description of the lived experience. For detailed analysis of schizophrenia disorders, see in Kircher and David 2003.

Legitimacy of the notion of self

Crucial point of departure on the nature of the self can be outlined by a contemporary debate on the so called *ecological* theory and *non-ecological* theory of the self. For the followers of ecological theories, it is in general a conceptual and experiential truth that any episode of experience necessarily includes a subject of experience. A non-ecological theory on the contrary denies that every experience is for a subject. According to Zahavi, the prominent representative of this approach is the neuroscientist Thomas Metzinger, who has proposed a theory based on a kind of *non-ownership* view, according to which the phenomenological notion of self has no explanatory value and therefore nothing exists “behind” the concept itself. Recent discussions have revealed even more different meanings of the term. Galen Strawson, who considers himself as a materialist, argues that: “when I talk about selves [...] I mean selves as classically conceived: internal mental things, internal mental presences” (Strawson 2010). Whatever a self is, it is certainly a) a subject of experience and it is not b) a human being considered as a whole. So, according to Strawson, the problem about the existence of a self arises from our everyday self-experience. It is a self described as: a) subject of experience, a conscious feeler and thinker, b) a thing, c) a mental thing, d) a persisting thing, e) an agent or f) something provided with personality. On the basis of new research findings, many philosophers strongly recall a naturalistic explanation of conscious experience and self (Blackmore, Metzinger).⁵ Naturalism and, in particular the already mentioned method of reduction, is a “*nomme de guerre*”. Third-person perspective has been criticized for not taking conscious self and “phenomenology seriously” (Chalmers 1995) or neglecting the “irreducibility of the first person story” (Velmans 2004). M. Velmans claims, for example, that D. Dennett simply states that the first-person access to phenomenal qualities has no place in the third-person science, and, therefore, no ultimate place in an understanding of consciousness. For phenomenologists conscious phenomenology and the

⁵ Neurocognitive research supports the idea of *asymmetry* between introspectively experienced conscious states and a theoretically founded explanation of ongoing causal processes. As recent findings show, experienced priority of thoughts before the act, consistency of thoughts about the planned act features rather magical than causal relations in explaining person’s behaviour. As David Wegner put it concisely, “the experience of will is like magic” (Wegner 2002: 289). Study of normal and impaired consciousness indicates that the experience of conscious volitional activity can occur: a) before the act, b) right after the act, c) during the act. A person may feel conscious will in the case of an action he has not anticipated (confabulation of intentions) or he does not feel responsibility for the performed action (“alien-hand syndrome”). Besides, when actions are caused unconsciously, people tend to explain their behavior in terms of mysterious forces (automatisms) or just “make up” stories (cognitive dissonance).

self are both self-evident and ontologically primary. From this perspective it seems that, philosophers such as D. Dennett or P. Churchland do not “give credence to phenomenology”. So, while on the one hand holding *a priori* antireductive position somehow “guarantees” taking the first-person experience seriously, on the other hand followers of reductionist accounts are “out of the game”. But *what* exactly are the grounds to accept antireductive perspective as a starting point, *before* the very investigation begins? M. Velmans argues that “once a definition of ‘consciousness’ is firmly grounded within its phenomenology, investigations on its ontology and relationships to entities, events and processes, that are not conscious, can begin” (Velmans 2009: 139).

A great number of theories on the nature of the self reject a *reduction* of conscious phenomenology to brain states or functions. At the same time, several philosophers fully accept that there is an *intimate relationship* between conscious life and brain (Searle, Chalmers). What is at stake is the *nature* of this intimate relationship. In his almost unrevised philosophical conception, John Searle (1992) accepts that conscious states have special phenomenal properties: for example, they are intentional, subjective and private, which are characteristics that traditionally distinguished the mental from the physical sphere. However, as critics rightly point out, Searle simply *declares* that these facts about conscious self are “objective *physical facts*” about the brain, thereby reducing the domain of “mental” to a subclass of what is “physical”, *by an act of redefinition* – leaving out of consideration the problem of how objects such as brains can produce such intentional, subjective, private states. It is hard to provide interpretations of many theoretical conceptions and approaches, because physicalist, functionalist, naturalistic dualist and modern dual-aspect theories agree that, in humans, every single conscious experience is likely to be accompanied by correlated activity in the brain (the neural correlates of consciousness). At the same time, in the line of phenomenologists, naturalistic dualists or dual-aspect theorists reject the reduction of phenomenal consciousness to brain states (Chalmers 1995). Dual-aspect theory suggests that conscious experiences and their correlated brain states are conform to the appearance of mind when it is viewed from respectively a first and a third-person perspective, and that these aspects of mind are mutually irreducible. If so, the discovery of the neural correlates of given experiences will not settle the fundamental differences amongst these theories. On the one hand scholars seem to agree on the fact that no ontological view is automatically privileged, that phenomenal consciousness should not be defined in a way that *assumes* the result of this debate. At the same time, as shown above, insisting on a priori metaphysics, first-person ontology turns these claims to mere proclamations.

To what extent the different philosophical perspectives on the nature of

the self may complement or exclude each other, this remains a difficult and open question. Answering this question requires us to clarify *what* can and what *cannot* be reconciled among the proposed ontological and epistemological perspectives.

Embodied mind and self

The meaning and use of the term “embodiment” and especially “embodied cognition” has undergone a revision in the development of cognitive science and philosophy. Within the first-generation cognitive science – up to the 1960s – philosophers focused on ideas about representational-computationist theory of mind. Popularity of the metaphor *Mind is a software as Brain is a hardware* has become a popular and useful heuristic tool in cognitive research. Conscious states of minds were studied independently from brain functions. Cognition was considered as embodied when it was deeply dependent on features of the physical body of an agent or system. More precisely, physical body has been understood as functioning *beyond* the brain, as “something” that plays a significant causal role in cognitive processing. This view contrasted with the traditional view of those philosophers of mind that have considered the body as peripheral with respect to the understanding of the nature of mind and cognition. Upholders of embodied cognitive science mainly appealed to new findings of cognitive neuroscience, clinical practice and experimental work. Since the late 1970s the situation has turned quite dramatic due to an evident and strong dependence of concepts and reason on the body as well as of the centrality of conceptualization and reason on metaphorical language (metaphor, imagery, prototypes, etc.).⁶ Greater difference between the first and the second generation of cognitive sciences are given by the fact that the followers of the latter approach profoundly refuse to put any priori philosophical as-

⁶ Metaphors play an important cognitive and argumentative role also in testable hypotheses and models. P. Churchland’s (1995) neurocomputational model of consciousness uses the metaphor of *recurrent pathways*, which “bring[s] back to its second layer information about the earlier states of the same layer [...] this system contains an elementary form of short-term memory”. S. Greenfield (1995) views consciousness as a continuum in phylogeny and ontogeny. In her “concentric theory” the epicenter (intensity) of consciousness resembles a “*stone thrown in a water*”. A. Damasio (1999) compares the rise of feeling about what happens – consciousness – with “*an actor stepping from the curtain on the scene, from the dark to the light*”. The activity of autonomous nervous system reminds him of a “*tree of life*”. E. Goldberg (2009) compares workings of the prefrontal cortex to the ongoing activity between branches and roots and adopts the metaphor of brain as *conductor of an orchestra*. According to scholars, the use of metaphorical language in these models is justified by: a) the existence of a variety of levels in explaining states of mind, b) the absence of a detailed brain activity map, c) the communication of meanings from a new perspective and d) the description of phenomena difficult to grasp.

sumptions *ahead of* the basic methodological commitments. From their “self in the flesh” perspective, George Lakoff and Mark Johnson (1999) strictly identified embodiment with bodies (sensorimotor experience) and neuronal activity of the brain. The fact that mind is embodied and that its working is largely unconscious has been analyzed with the help of the concept of *cognitive unconscious* – the realm of thought that is completely inaccessible to direct conscious introspection, such as automatic cognitive operations or implicit knowledge. Conceptual systems and our capacity of thought are shaped by the nature of our brains, bodies, bodily interactions. Through a metaphor, mind is conceptualized in terms of a container-image, it is given an inside and an outside. Innerly *felt* ideas and concepts expressed through language refer to things of the external (physical) world. According to Lakoff and Johnson, the work of mechanisms of conceptual metaphor requires the use of the “logic of physical” to describe the inner “mental realm”. Lakoff argues that mind has been conceptualized in bodily terms due to a *mapping* across conceptual domains. The first domain includes the target (tenor) – the subject to which attributes are ascribed – whereas the second domain includes the vehicle – the object whose attributes are borrowed or transferred. This process can be illustrated by the metaphor *Well-Functioning Mind is a Healthy Body*, as following: 1. domain: well-functioning mind is a target; 2. domain: healthy body is a vehicle. Ideas are food, acquiring ideas consists in eating, helpful ideas are nutritious food, disturbing ideas are disgusting food, fully comprehension is to digest and communicating is to feed. Ideas are conceptualized as an appetite for food, for learning, whereas raw facts are not suitable because they are not digestible. Digestion is the full “mental processing” required to understand.

According to Lakoff and Johnson (1999), mind is thus a) inherently embodied, b) thought is mostly unconscious and c) abstract concepts are largely metaphorical. In their perspective, considering reason as disembodied is one of the greatest errors of traditional philosophers. In their theory of *conceptual metaphor*, the two authors elaborated a detailed criticism of philosophical “objectivist” approach based on transcendental and disembodied reason. The claim that the very structure of reason comes from the details of our embodiment has been supported by an intense experimental and theoretical research (Grady 1999; Naranayan 2000). On the basis of the empirical findings, we can say that, in order to understand reason, we have to understand the details of our visual system, our motor system as well as the general mechanisms of neural binding. Reason is in no way a transcendent feature of the universe or of disembodied mind. On the contrary, it is shaped crucially by the peculiarities of human bodies, by the remarkable details of the neural structure of the brain as well as by the multitude ways of our everyday functioning in the world.

Beside its being evolutionary, reason is not “universal” in the transcendent sense, that is, it is not part of the structure of the universe. It is universal, however, in that it is a capacity shared universally by all human beings. What allows it to be shared are the commonalities that exist in the way our minds are embodied. The shift in our understanding of reason brought by cognitive linguists entails a corresponding shift in our understanding of what we are as human beings. According to Lakoff and Johnson, what we now know about mind is radically at odds with the classical philosophical views of what a person is. In accordance with this proposal we should be also sceptical about the phenomenological account that argues for the existence of a *direct conscious access* to experience itself and to most of our thought. Phenomenologists would not, however, disagree with Lakoff and Johnson on the fact that reflection, in revealing the structure of experience, must be supplemented by empirical research. The point of departure concerns mostly the reality of *cognitive unconscious*. We have no direct access to this phenomenon and are largely unaware of its metaphorical nature. Even from the point of view of the “science friendly” phenomenology (Zahavi, Gallagher and others) this idea could hardly be implemented in the phenomenological study of the self.

F. Varela, in step with Lakoff and Johnson, elaborated a conception of *enactive cognition*. The book *The Embodied Mind* (Varela, Thompson, Rosch 1991) was an attempt to re-direct the cognitive sciences by integrating them with the phenomenological perspective developed in the well-known work by M. Merleau-Ponty. Varela argued that the standard division between pre-given, external features of the world and internal symbolic representations should be dropped, as it does not allow us to combine the feedback from embodied actions with the cognition through the actions of a situated cognitive agent. Traditional accounts basically state that there are no computations without representations, and that view cognition is successfully functioning when any device can support and manipulate symbols in order to solve the problem given to the system. Along with Thompson and Rosch, Varela introduced the concept of *enaction*, in order to develop a framework that emphasizes the idea that the experienced world is portrayed and determined by mutual interactions between the physiology of the organism, its sensorimotor circuit and the environment. Emphasis on the structural combination of brain-body-world constitutes the basis of their program of embodied cognition – an idea according to which cognitive agents bring forth a world by means of the activity of their *situated living bodies*. As the metaphor of “bringing forth a world” of meaningful experience implies such a world, in this view knowledge emerges through the primary agent’s bodily engagement with the environment, rather than being simply determined by and dependent upon either pre-existent situ-

ations or personal construals. Cognition has been considered as a dynamic sensorimotor activity and the given and experienced world is essentially enacted, in that it emerges through the bodily activities of the organism. This approach develops a view of enaction as essentially different from computation, as it had been conceived by the first-generation of cognitive scientists. Among the others, the phenomenologists Dan Zahavi, Shaun Gallagher are well-aware of the fact that embodied cognitive science leads phenomenological accounts to new directions. According to D. Zahavi, being self-aware is not to withdraw into a sort of self-enclosed interiority, but subjectivity is rather open towards and engaged within the world, and it is precisely through this openness that it reveals itself. In his opinion, crucial phenomenological findings have to go hand in hand with contemporary theoretical and ongoing experiment research in several disciplines. Phenomenology does not try so much to understand how physicality opens up the experience of the self, the world and the others, but it rather aims to specify the *mechanisms* that just explain how cognition is grounded in and deeply constrained by the bodily nature of cognitive agency (Gallagher, Zahavi 2008). The general characterization of embodied cognition provides the basis for the embodiment thesis, which means that many features of cognition are embodied insofar they are deeply dependent on characteristics of the physical body of an agent, so that the agent's beyond-the-brain body plays a significant causal role or a physically constitutive role in this agent's cognitive processing. Finally in the present text I referred to three meanings of the term *embodiment*, that of the first generation of cognitivists (beyond-the-brain body-world), that of phenomenologists (experience-body-world) and that of cognitive linguists (brain-body-world). In the recent context of mind and consciousness studies it seems most plausible to search for mutually inspiring accounts that are able to unfold the co-existence of embodiment, enactment and a need for multilevel explanations.

Illusory nature of the self

As already stated, Thomas Metzinger introduced a thought that gave rise to hypotheses on the "myth of the self". In his book *The Ego Tunnel* he argues: "There is no such thing as a self. Contrary to what most people believe, nobody has ever *been* or *had* a self" (Metzinger 2010: 1). Strikingly enough, his approach manifests one of everlasting misunderstandings on the concept of self. Metzinger criticizes a specific understanding of self – primarily (a type of) phenomenological concept of the self as "*something given*", postulated by a priori reasoning. Rejecting this peculiar account on the self leads some philosophers

to the even more peculiar idea that for Metzinger self and consciousness do not exist! What is more important is, however, the explanatory force of Metzinger's hypothesis demonstrated by the so far classic experiment known as the "*the rubber-band illusion*". Participants of this experiment observed a rubber hand lying on the desk in front of them. At the same time their own corresponding hand has been concealed from their view by a screen. The visible rubber hand and the unseen hand were synchronously stroked with a probe. After a certain time (cca 60 seconds) the rubber-hand illusion emerges. Participants experienced the rubber hand as their own and they felt the repeated strokes in the rubber hand. They also felt a "virtual arm" – the connection from their shoulder to the fake hand on the table in front of them. There have been more experiments that have simulated a similar experience on the whole body and not only on a part of it. For example, the *out-of-body experience* – condition during which people experience the sensation of being outside their bodies, looking at themselves from above. Scientists are recently able to simulate this phenomenon using a rather simple technique. The experiment of creating an *out-of-body experience* was carried out by the neuroscientist Olaf Blanke (2012). During the experiment the test participant had to wear virtual reality goggles while standing in an empty room. A camera located behind the participant projected an image – which appeared as if it was six feet in front of the participant – within the goggles. Blanke then poked the participant's back for one minute with a stick, and this action was also visible within the goggles. By varying the delay of the images shown in the goggles, Blanke was able to detect certain differences in the experience. When poking was synchronous, tested people reportedly had a sense of being momentarily within the illusory body. When pokes were not synchronous, this illusion did not occur. The experimental induction of out-of-body experiences outlines the unique method by which the illusion was created and also brings interesting implications for further studies. An *out-of-body experience* occurs when a person who is awake sees their own body from a location outside the physical body. These experiences have been reported in clinical conditions in which brain function is compromised, such as stroke, epilepsy and drug abuse. They have also been reported in connection with traumatic experiences such as car accidents. About one in ten people claim to have had an *out-of-body experience* once in their lives. In another experimental setting, the illusion was produced by using head-mounted displays to enable participants to watch a live film recorded by two video cameras located behind their head. The image shot by the left video camera was shown on the left-eye display whereas the image filmed by the right camera on the right-eye display. The participants see these as one "stereoscopic" (3D) image, so they see their own back displayed from the per-

spective of someone sitting behind them. The researcher then stood just beside the participant and used two plastic rods to simultaneously touch out of view the participant's actual chest and the chest of the illusory body, moving this second rod towards where the illusory chest would be located, just below the camera's perspective. The participants confirmed that they had experienced sitting behind their physical body and looking at it from that location. As experimenters found out – “this was a bizarre, fascinating experience for the participants – it felt absolutely real for them and was not scary”. An additional experiment has been performed, in order to test this kind of illusion further and to provide objective evidences. It was based on the measurement of the participants' physiological response – specifically the level of perspiration on the skin – in a context where they felt the illusory body was threatened. Their bodily response strongly indicated that they thought that the threat was real. Although *out-of-body experiences* have been reported in a number of clinical conditions, the neuroscientific basis of this phenomenon remains unclear. According to neuroscientists, the invention of this illusion is important, because it reveals the basic mechanism that produces the feeling of being inside one's own physical body. This represents a significant advance because the experience of one's own body as the centre of awareness is a fundamental aspect of self-consciousness. It is the first illusion to involve a change in the perceived location of the self, related to the physical body. It is also different from any virtual reality set-up, because it examines what happens when you look at yourself, and there is also multisensory information that triggers the illusion. There has been no way of inducing an out-of-body experience in healthy people before, apart from unsubstantiated reports in occult literature.

When Susan Blackmore (2005) claims that consciousness is truly a curious illusion, it is exactly what she means. At the same time she does not think that consciousness does not exist, as her critics claim: “I mean that consciousness is not what it seems to be”. An illusion is *something* that is not what it seems to be”. And for this reason Blackmore considers the science of consciousness as built on false assumptions. Unlike Blackmore, Daniel Wegner argues that the experience of conscious will is a feeling that helps us to appreciate our authorship of what we do. In his opinion, it is important to understand how conscious will might be an illusion, which does not mean that it is an illusion as a whole. Conscious self is an illusion in the sense that “the experience of consciously willing an action is not a direct indication that the conscious thought has caused the action” (Wegner 2002: 2). Max Velmans (2004) claims that, despite Wegner's insights on how conscious experiences relate to brain processes, it is necessary to outline in which sense conscious will is *not* an illusion. He agrees with Wegner's causal story of how conscious will arises and

enters causally into play within subsequent mental processing. For Velmans, however, this causal story remains a first-person story. Conscious free will is not an illusion in the sense that this first-person story is compatible with and complementary to a third-person account of voluntary processing in the mind/brain. So, in what sense can conscious free will be considered as an illusion? Let's suppose that the causal role of any conscious experience in a conscious mental process can be said to be an illusion. Mental process then might be conscious (a) in the sense that one is conscious *of* it, (b) in the sense that it *results* in a conscious experience, and (c) in the sense that conscious experience plays a *causal role* in that process. In accordance with Velmans, Wegner has shown that the experienced will is a *representation* of what is going on in the mind-brain. Preconscious decision of making processes can be said to become conscious once these processes *result* in a conscious free will experience. Velmans argues that conscious will is illusionary when an experience of will can arise from voluntary processes and represent them without governing them. The illusion is based on the feeling that our conscious will determines our decisions and actions. Still a question suddenly arises: How can experience of will *arise* from "voluntary processes"? *What* precedes what? Voluntary processes, as Velmans claims, are not an illusion. Although conscious representations *of* those processes can be inaccurate, they can also be accurate, and evolution has "shown" that mental representations (conscious or not) are more often right than wrong. The nature of both voluntary processes and conscious representations has thus remained unexplained and appears rather mysterious. As indicated above, the heterogeneity of "definitions" of self makes it hard to identify usages of the concept that are less confused and useful for the scientific understanding of self (consciousness). Unsurprisingly, differences in characteristics of self lead to opposite perspectives of investigation on the nature and function not only of self but of conscious states in general. Traditional dichotomies conscious-unconscious, inner-outer, subjective-objective still play their role in contemporary debates on the status of consciousness. Eliminative materialists, naturalist-reductionists, behaviorists or functionalists, are frequently blamed for rejecting the very existence of the phenomenon itself. Contrary to this widespread intuition, *nobody* really wants to reject the existence of our self or inner conscious life. So, it seems that something rather odd has been happening in consciousness studies. Identifying conscious experience with an illusion in the sense of a non-existent phenomenon has led scholars to extremely misleading interpretations. Neuroscientific research, for example, has been interpreted so that laboratory experiments show that before we become aware of making a decision, our "brains have already laid the groundwork for it". This takes us only a step further to the most strange

ideas on mind-brain relationship: “If our brains are making our decisions for us subconsciously, how can we be responsible for our actions? How can our legal system punish criminals or God punish sinners who aren’t in full control of their decision-making processes“?

What matters?

The existence of a self, conscious thoughts and feelings as *experienced* states is evident. The way we perceive, feel and think in our everyday experience plays an important role in our actions and behavior. This fact alone should be a sufficient condition to make the *reality* our selves quite credible. The self ‘located’ within experience of human beings makes a plausible starting point for any systematic study of its nature. However, on the basis of the the conceptions that we have briefly reviewed above, it is hard to see *how* the different philosophical perspectives can complement each other. Finding a way out of the theoretical labyrinth within the study of self and consciousness is therefore a great challenge. Why is it so hard for philosophers to consider conscious selves situated *in* the surrounding world? Why are some of them unable or even unwilling to admit the implications of considering conscious states as natural phenomena? A satisfying answer to these questions requires surely a deeper analysis than what I can provide in the present text. I would nevertheless indicate few points. On the one hand philosophers seem to uphold the natural character of our conscious states which are taken as legitimate facts about our existence. On the other hand (sometimes at the same time!) some of them reject the idea that conscious experience and self are natural phenomena in the same sense as other natural phenomena studied by empirical science. Due to the subjective and phenomenal character of mental life, our minds and conscious states resist to any reduction and reductive explanation. According to antireductionists, their ontology is mainly a “first-person ontology”. And this claim goes hand in hand with a rather strange idea according to which the appearance-reality does not work for the study and explanation of conscious states. Why? Because in this case the appearance already *is* reality! (Searle 1982). Furthermore, a “mixture“ of natural and irreducible, knowable and unique results in a kind of “alchemist” picture of a human being. When looking at a brain scan then, for example, some scholars are tempted to ask questions such as: “Where are feelings and images?” “Can brain scanning discover consciousness in the brain? *If* a thought or a decision are considered a priori as “something other”, intangible or irreducible, of course, they cannot be measured nor seen. And, now it seems that they are eliminated. After all,

it is correct to say that, in general, experiencing our intimate, subjective feelings or desires does not require any kind of ontological commitment, because every person's thoughts, feelings, desires exist just as experienced states or events (processes). Why should the fact that every person perceives a sense of self or selfhood legitimate first-person ontology? And, moreover, a main *irreducibility* of our conscious lives? Finally, let us suppose, in harmony with Lakoff, that abstract thought is mostly metaphorical and that metaphorical thought is the main tool of philosophical insight. Metaphors *show* where our ideas, thoughts, desires come from and what we talk about when talking about mental states and events. It is even more important that they point out an epistemic origin of asymmetry between consciously felt experience and theoretical explanation of its nature. In addition, metaphorical language *shows vividly* vagueness of an idea of having direct access to the causes of our behavior, to the nature of our mind's *I* and subjective feelings. Appealing to ontological distinction between physical-mental realm (properties) or irreducible nature of our conscious lives, philosophers thus take metaphors *literally* – as what they are *not*. Whether the self is considered as an illusion or fiction, this is, after all, not important. Arguing that the self is a fiction does not deprive it from its existence *as* a highly useful metaphor or theoretical entity. By the same token, metaphorical language, metaphors which somehow *hide* the fleshy nature of conscious states „from our own sight“ are very real indeed. Thoughts, feelings, hopes are as real as rainbows, suffering or a smile on a child's face. We feel that consciousness gives purpose to our existence. It is an inner world that meshes with the external one, but is always distinct from it. Notwithstanding, our conscious life, the status we give to *our selves* often looks like a wonderland. And much can be yet learned from that: “‘But I don't want to go among mad people,’ Alice remarked. ‘Oh, you can't help that,’ said the Cat. ‘We're all mad here. I'm mad. You're mad.’ ‘How do you know I'm mad?’ said Alice. ‘You must be,’ said the Cat. ‘Or you wouldn't have come here.’” (Lewis Carroll, *Alice in Wonderland*)

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