PHENOMENOLOGY AND PSYCHOSOMATICS:
A JUNGIAN AND POST-JUNGIAN APPROACH

Értekezés a doktori (Ph.D.) fokozat megszerzése érdekében
a **filozófiai tudományok** tudományágban

Írta: **Szabó Attila,** okleveles filozófia szakos bölcsész és okleveles biológus.

Készült a Debreceni Egyetem **Humán Tudományok Doktori Iskolája**
(Filozófia programja) keretében

Témavezető: . . . . . .
Dr. Kelemen István

A doktori szigorlati bizottság:
elnök: Dr. ……
tagok: Dr. ……
Dr. ……

A doktori szigorlat időpontja: 200… . …… … .

Az értekezés bírálói:
Dr. .....
Dr. ……
Dr. .....

A bírálóbizottság:
elnök: Dr. .....
tagok: Dr. ……..
Dr. ……..
Dr. ……..
Dr. ……..

A nyilvános vita időpontja: 200… . …… … .

THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.)

PHENOMENOLOGY AND PSYCHOSOMATICS:

A JUNGIAN AND POST-JUNGIAN APPROACH

Attila Szabó

UNIVERSITY OF DEBRECEN

FACULTY OF ARTS AND HUMANITIES

2016

NYILATKOZAT

Én, Szabó Attila, teljes felelősségem tudatában kijelentem, hogy a benyújtott értekezés önálló munka, a szerzői jog nemzetközi normáinak tiszteletben tartásával készült, a benne található irodalmi hivatkozások egyértelműek és teljesek.

Nem állok doktori fokozat visszavonására irányuló eljárás alatt, illetve 5 éven belül nem vontak vissza tőlem odaítélt doktori fokozatot. Jelen értekezést korábban más intézményben nem nyújtottam be és azt nem utasították el.

Debrecen, 2016. március 24.

_____

Szabó Attila

TABLE OF CONTENTS

1. INTRODUCTION

In this work, I will attempt to characterize the major philosophical aspects of the psychosomatic phenomenon by means of the tools of contemporary phenomenology and analytical psychology. First and foremost, a historical review about the complicated matters of consciousness studies will be performed. The aim of this review is to clarify the context of unnecessary circles of thought, therefore I will strictly focus on two philosophical traditions of the modern era concerning the mind-body problem: 1) the Cartesian philosophy and interpretators of Descartes, and 2) the approach of Leibniz, and its critique by Kant and Schopenhauer. This will hopefully lead to a comprehensible presentation of the topic in a contemporary context of consciousness studies. On the other hand, I will also use some of the basic concepts of the phenomenological tradition – focusing on Husserl's and Merleau-Ponty's phenomenology – to outline the major features of embodied cognition, and will also apply modern scientific-philosophical theories (e.g. Gallagher's and Thompson's works) to create a context for further examinations. These further examinations will include a succinct philosophical critique of modern neuroscience, cognitive psychology, and reductionist approaches in general.

For a further theoretical survey of psychosomatic experiences, the depth psychological and the diverse transpersonal framework appears to be relevant. Thus far, the main contextual dilemma within this field has been the contradiction that emerges between the universal and the relativistic approaches, that is the main battlefield of contemporary postmodern critique. According to the postmodern movement of deconstructionism, the archetypal symbols and images are not the essential forms of the unconscious. The mythological themes and/or archetypal images are only certain features of a specific culture, there are no universal forms or the expressions of transpersonal realm (i.e. the "objective psyche" in Jungian terms). For some of the contemporary scholars, it is merely a metaphysical speculation to preserve the concept of an unhistorical universal mind, which exists without concrete situatedness. The images (the products of imagination and archetypal images) are not just "historic constructions" or "universal essences" in the universal mind, rather some kinds of "bridges", expressions of the trans-objective and trans-subjective unknown. This dynamism may provide us with a bridge to the unknown depths or heights of the psyche. This process also has the remarkable capability to induce a spontaneous phenomenological reduction. In this context, the main feature of the ego-Self axis

communication-mediated experiences is not the awfulness that typically appears in the observer, rather the capacity to uphold a spontaneous "phenomenological reduction". The traditional phenomenological investigation begins with the reduction. In Husserlian phenomenology the aim of the reduction is to "peel off" the ontological commitments, the cultural schemas from the observer's mind (which is but a merely ideal goal), and to enjoy and scrutinize the lively actual experience in its full-blown richness. According to this, in the second part of this work, the attempted philosophical methodology will include the maintenance of continuous phenomenal reduction in order to transcend the basic assumptions about perception and body schema within the context of psychosomatic phenomena. The main thesis of this part is the idea that the actual researches regarding the problems of psychointegration can be extended with the heuristic value of basic phenomenological concepts. In conclusion, the main purpose will be to show that Jung's works and the late ontology of Merleau-Ponty and Husserl can be powerful explanatory tools to describe and specify the features of the psychosomatic phenomenon.

In the last part my goal will be to show the mutually enlightening relation of psychedelic states and Jungian psychology in philosophy and biomedicine. We can consider altered conscious states – including psychedelic ones – as results of a psychodynamic process regulated by the ego-Self axis. In this respect, Jung's synchronicity, Reich's body-oriented therapy, the mechanism of the placebo-response complex (as developed by Kradin) and altered states of consciousness are in strong correlation. After showing that the working mechanism of placebo-response complex and psychedelic altered states are based on the self-regulatory role of the Jungian transcendent function, a general model of psychosomatics will be outlined that includes and integrates Jungian complex-psychology and modern embodiment theories. I will also hypothesize that altered conscious states can be understood as parts of an unique healing mechanism highly resembling to the psychosomatic features of nocebo/placebo-response complex with promising therapeutic potential in the treatment of various psychosomatic diseases when co-applied with embodiment-rooted approaches.

2. PART ONE

HISTORICAL AND CONCEPTUAL ROOTS OF THE MIND-BODY PROBLEM AND THE EMERGENCE OF PHENOMENOLOGY

"What is mind? No matter.
What is matter? Never mind."
— George Berkeley (1685-1753)

"I am interested in anything about revolt, disorder, chaos - especially activity that seems to have no meaning. It seems to me to be the road toward freedom... Rather than starting inside, I start outside and reach the mental through the physical."
— Jim Morrison

In the seventeenth century, the grand edifice of Western philosophy exhibited a relatively closed and well-ordered way of development. Most thinkers of this era dedicated themselves to resolve a general problem: the elucidation of the principles of human mind and reasoning. The contemporary philosophical and social atmosphere was particularly suitable to accomplish such an ambitious task; the intellectual milieu of the Renaissance had already eulogized and worshipped the triumph of *human reason* and mathematics became an universal tool in general philosophical investigation. This paean of mathematical methodology was unsurprising since it provided an unobscure, elegant and articulate way for the explanation and exposition of ideas. The great philosophers of this time – Descartes, Leibniz, Spinoza, Pascal – also excelled in mathematics and natural sciences. The major contemporary philosophical aspiration was to acquire an ideal epistemology based on pure mathematical principles, to build a system of thought „more geometrico" (Störig, 1985, 312-313). The quest for a solid and minimalistic method established on the ground of only a few axioms, situated within the context of the hegemony of reason, posed the Holy Grail of philosophical inquiry.

In the following part, my humble attempt will be to address the historical aspects of the mind-body problem – from Descartes and his contemporaries to modern times through phenomenology and the emergence of the twenty-first century philosophy (and

science) of consciousness[1] – in order to expose the central philosophical problems of consciousness, and clear the ground for a possible methodology based on a phenomenological and psychological dual-analysis.

2.1 Descartes and the mind-body problem

Descartes is often considered as the father of modern philosophy. Owen Flanagan emphasizes that Descartes' modernity lays in the mechanical paradigm of mind; this means that he was not only a systematic but also a bold thinker when he extended Galileo's mechanical conception of the universe to the human soul and mind. In this regard Descartes can be seen as a mechanical thinker (by developing the concept of *reflex*) and the father of dualism in philosophy of mind (Flanagan, 1991, 10-22). He was a major proponent of the idea of *mental substance*, a central thought in dualistic and idealistic systems, professing that minds are structured by non-physical substance.[2] In his *Discourse on Method* he presented two key ideas, which were elaborated in his later works: 1) human beings are thinking substances, and 2) matter is extension in motion (Kenny, 2010, 528). The Cartesian system is consequently *dualistic* stating that

[1] Philosophy of consciousness is by no means equated with „philosophy of mind". The contemporary philosophy of consciousness is a hybrid paradigm in which scientific endeavours plays crucial role (i.e. neuroscience especially). The terms „science of consciousness" and „consciousness studies" focusing on this interdisciplinary aspect of contemporary philosophy of consciousness. Firth and Rees argues that this programme originates in Descartes' philosophy. Descartes can be interpreted from at least two aspects: 1) by stating dualism he excluded consciousness from the sphere of scientific investigation; 2) Descartes was an „interactive dualist" who laid the foundations of the current researches of the neural correlates of consciousness (NCCs) by means of the pineal gland theory (Firth and Rees, 2007, 9). In this regard see further discussions in *chapter 2.1*.

[2] Descartes used the word „substance" to express something that can exist by itself and without being sustained by other substances. His interpretation of substance is closely related to but not identical with the Neoplatonistic conception of *hypostasis* and the Aristotelian *ousia*. As Forrest explains: „An *h-substance (hypostasis)* is some thing that has properties and stands in relations but is not itself a property or relation. (…) An *o-substance (ousia)* is something that can exist all by itself, a Humean 'distinct existence'. (…) Descartes' definition of a substance is explicitly that of an o-substance and because he holds that all else depends on God he says, incorrectly, that God is the only substance, meaning the only o-substance. Now Descartes considers those non-divine things that exist independently from each other to be substances in a different sense. And I could burden you with a definition of a *semi-o-substance* to apply to them. However, for these non-divine things Descartes uses the rule that something is a substance if and only if it has an attribute, hence, in effect, talking of h-substances." (Forrest, 2007, 137) Since getting engaged with analytical philosophical debates would not help to better understand the main topic of this work, I will henceforth use the term in its primary form as defined above.

mind and matter are *two, essentially exclusive substances*. This ontology is based on Descartes' radical and systematic skepticism: since the senses can deceive us, in order to achieve true knowledge, the philosopher must doubt what can be doubted whatsoever. We cannot even distinguish dreams from our ordinary waking states:

> „I decided to feign that everything that had entered my mind hitherto was no more true than the illusions or dreams. But immediately upon this I noticed that while I was trying to think everything false, it must needs be that I, who was thinking this, was something." (Descartes, 1985a, 127)

He follows with one of the central thoughts of his epistemology, the introduction of the idea of *„Cogito, ergo sum"*:

> „And observing that this truth 'I am thinking, therefore I exist' was so solid and secure that the most extravagant suppositions of sceptics could not overthrow it, I judged that I need not scruple to accept it as the first principle of philosophy that I was seeking." (Descartes, 1985a, 127)

This second quote is particularly important, because Descartes protects his method – i.e. the systematic or methodic doubt – from scepticism. Flanagen states that the *cogito ergo sum* is a „primal universal intuition" that paradoxically designed to unfold the sphere of undaubtible and overcome interminable scepticism (Flanagan, 1991, 9). Descartes deduces the basic principles of his philosophy from this core idea. If I lacked the ability of thinking, I could not believe that I exist. Therefore, I am a substance, which full essence is „to think", and my body – as it contributes to my *being* – is not part of my essence. Thus was established the first and major Cartesian thesis.

The truth of *Cogito* is evident and undeniable, as anytime I perceive something *„clare et distincte"* I am sure of its truth.[3] Naturally, the force of Descartes' intuitions can be questioned by materialists who are unable to share the convictions in his intuitions and premises. The thought-experiments of Descartes' epistemological individualism's will fail to persuade other scholars of the mind sciences (Flanagan, 1991, 15). Furthermore, Descartes himself hesitates between *interactionism* and

[3] It is worth mentioning that the concept of *clear and distinct* ideas also become programmatic in the husserlian phenomenology as "clear intuition".

metaphysical dualism regarding the mind-body relation. On the other hand, when we perceive material objects, all of their characteristics seem to be size, shape, and movement. This led Descartes to his second major thesis, that is, matter is but extension in motion (Kenny, 2010, 529; Schouls 1980, 121-123). Thus he describes matter as *res extensa* or the „extended thing", what he sometimes also calls as the *„corporeal substance"*. In his famous wax thought experiment, he examines all the physical and perceivable properties of a piece of wax (e.g. color, shape, size, texture, etc.). He then demonstrates that all these properties change as the wax is put close to fire and starts to melt. Still, some of the physical characteristics do not change, such as extension, changeability, or movability. Conversely, in his *Principia Philosophiae* and second *Meditations*, Descartes contends that the above mentioned „thinking substance" or *res cogitans* is unchanging and its existence is indubitable. This substance emerges as a solid rock in Cartesian epsitemology and is often referred to as „consciousness" in the philosophy and science of mind:

> „I am, then, in the strict sense only a thing that thinks; that is, I am a mind, or intelligence, intellect, reason - words whose meaning I have been ignorant of until now. But for all that I am a thing which is real and which truly exists. But what kind of a thing? As I have just said - a thinking thing." (Descartes, 1984, 18)

Our consciousness is operating with thoughts. For Descartes, thoughts are considered as the general contents of the human mind. A fantasy, the subjects of daydreaming, a taste, a headache, a view of an Oak tree, all of them – in his terminology – are thoughts. The act of thinking is therefore includes not only intellectual meditations, but also emotion, pleasure, pain, various mental images, sensations and intentionality. However, they have a common feature that makes them „thoughts": all of them are elements of consciousness (Kenny, 2010, 592). It is very important to understand what does the word „thought" mean in Descartes' system and how he applies it to refer to the various forms of conscious experience:

> „Lastly, it is also the same 'I' who has sensory perceptions, or is aware of bodily things as it were through the senses. For example, I am now seeing light, hearing a noise, feeling heat. But I am asleep, so all this is false. Yet I certainly seem to see, to hear, and to be warmed. This cannot be false; what is called 'having a sensory

perception' is strictly just this, and in this restricted sense of the term it is simply thinking." (Descartes, 1984, 19)

In the modern philosophy and science of consciousness, experts often refer to these as „sensory/sense data".[4] According to Descartes, albeit completely different in essence, mind and body (*res cogitans* and *res extensa*) are tightly intertwined. How is it possible that mind and body are separated from each-other in an ontological manner, and yet they prone to *interact*? The *idea* of moving one's arm is a conscious-mental phenomenon and the act of actual bodily movement is a physical one. Descartes proposes several answers to the mind-body problem, yet these alternatives seem to be quiet *ad-hoc* hypotheses. In one way, Descartes tries to describe the interaction by means of divine intervention contending that both body and mind are „wound up by God to keep time with the other, so that, on occasion of my volition, purely physical laws cause my arm to move, although my will has not really acted on my body" (Russell, 1967, 562). His other notion that an organ (the pineal gland) stands in-between and somehow connects the two substances is an intriguing but hardly acceptable idea. In this regard the immaterial soul is able to interact with the body by means of the resonance of the pineal gland and influencing the "animal spirits" in the nerve-tubes. The drawback of this quasi-physicalistic construction is that it contravenes the law of conservation of energy (something cannot come from nothing) and the conception of thinking substance (Flanagan, 1991, 21). In conclusion, Descartes is well aware of the interaction of mind and body (this is attested in his *passion-theory*[5] as well), but the "interactive dualism" still remains highly problematic since there is no room for an

[4] Considering perception and mental operations, Descartes distinguishes amongst several types of *ideas*. These could originate in external objects but might as well root in (internal) imagination. For details see Kenny's and Schouls' works (Kenny, 2010, 592-596; Schouls 1980, 116-146).

[5] In his work, *The Passions of the Soul*, Descartes offers a sort of teleological explanation of mind-body interactions. According to his thesis, the associations between bodily and mental states (as far as passions specifically concerned!) are eventually established and regulated by us in facilitating or „keeping with our good". As Shapiro puts it: „We come to reform these associations as we gain a clearer understanding of our good – a good proper not simply to our body but to us as unions of mind and body. I have concluded with a suggestion that this teleological explanation of mental-physical associations can afford some insight into Descartes' somewhat cryptic remarks about the unity of a human being. For we can understand mind and body as united through the soul's acting on its conception of the human good. Understanding mind and body as united in this way does not require that we understand the Cartesian human being as either an Aristotelian substance or as a third Cartesian substance, in the sense in which mind and body are substances." (Shapiro, 2003, 246-247)

immaterial mind in a causally closed (physical) universe and the reflex-model would only suffice for the explanation of bodily functions. Further complicates the matter that in one of his papers (*Description of the Human Body and of all its Functions*) Descartes suggests that the seat or organ of the „common sense" is the brain, but he fails to show the means it is contributing to bodily actions (Descartes, 1985b, 316).

The prototype of mind-body dualism certainly emerged in Descartes' philosophy; however the corpus is so complex that it is not advisable to interpret Descartes as the only forerunner of substance dualism. In the following chapter I will delineate the idea of psychophysical parallelism of Leibniz that moved away from the contradictory nature of interactionism.

2.2 Leibniz: a possible new explanatory frame

In the philosophy of mind, *psychophysical parallelism* (based on the pre-established harmony) is a theory proposing that experiences related to mind and body happen simultaneously without any sort of causal interaction. However, this is quite not a revolutionary idea against Cartesian dualism. As Russel noted, the notion of parallelism is well-founded in modern philosophy. Nevertheless, Leibniz "(…) loved to call himself 'the author of the system of the pre-established harmony'. The pre-established harmony is that in his philosophy of which he seems to have been proudest. Like the mutual independence of substances, this was doubtless suggested by the course of Cartesian philosophy. The simile of the clocks, by which he illustrated it, is to be found in Geulincx and other contemporary occasionalists, and even in Des Cartes" (Russell, 1992, 160). As we can see, the followers of psychophysical parallelism deny the possibility of interaction between the corporeal and mental substances. Rather they claim that although mind and body shall be regarded as two separate phenomena, they cannot be disunited either. While Cartesians are adherent to the idea of *interactionism* (that is body and mind – as separate substances – are in direct interaction), psychophysical parallelism emerged as a second, alternative philosophical approach to the problem of mind-body dualism in the late seventeenth century thank to Gottfried Wilhelm Leibniz. Leibniz, belonging to the generation of philosophers shortly after Descartes, devised a system similar in methodology but entirely different in ontology. As Descartes is regarded as the father of modern philosophy, Leibniz is often

considered as the father of modern German philosophy in scholarly circles. As one of the creators of differential and infinitesimal calculus, he is a major figure in the history of logic and mathematics. Leibniz was very well familiar with the tenets of Descartes, Spinoza, Arnauld and Malebranche, and developed his philosophy partly on the ground of their ideas (Russell, 1967, 582; Störig, 1985, 333-334).

To grasp the essence of one of the main fields of Leibnizian metaphysics, i.e. the question of mind-body relations, it might be expedient to start with his criticism on the Cartesian conception of substance. He criticized the notion from two directions. As we have already discussed earlier, Descartes deemed that every phenomenon in nature can be explained and derived from the concept of motion. Leibniz argues that if we examine the world of physical bodies from the perspective of extension, then „motion" is but a change of their position in correlation with one-another. A drift of the point of reference in space. So, is it possible to determine motion objectively? Does not seem to be a feasible idea. Motion, as such, is relative; the apparent movement of a physical object is always depending on the position of the observer.[6] Leibniz criticized the Cartesian concept of res extensa from another point of view, as well. His second argument is based on two aspects of the mathematical concept of space: continuity and divisibility. If we try to comprehend physical objects in space in a purely geometrical manner, then matter must be infinitely divisible as well as continuum-like. Nevertheless, „continuum" is merely an abstract concept, it does not have objective reality, it can be divided infinitely *because* it is an *idea itself*. Leibniz recognized that real matter cannot be identified with extension, reality and its parts cannot be divided *ad libitum* (Leibniz, 2006, 129). At this point, he got very close to the atomic theory of the ancient greek philosophers and to the ontology of Pierre Gassendi, one of his contemporaries. However, Leibniz was not satisfied with the old atomistic concepts; although he committed himself to the modern idea of mechanistic natural sciences, he also believed that an ultimate explanation of Nature must be based on metaphysical notions (Störig, 1985, 336). Therefore, he established his cosmology on both ancient (Aristotlean

[6] It is astounding, how close Leibniz was to the idea of the theory of relativity. Another intriguing historical observation is that Leibniz's methodological ethos was very close to Einstein's: "Einstein once quipped that most scientists accepted a theory when it was confirmed by experimental data, but that he never accepted the data until it was confirmed by theory. This was the spirit that Leibniz brought to his physics: distrust appearances until reason is satisfied. Leibniz's many arguments were thus designed to expose Newton's theories as philosophical nonsense, and therefore to demonstrate that they could not be fundamental, could not be a final theory." (Kennedy, 2003, 117-118)

entelecheia) and modern (mechanistic-atomistic) conceptions and created his theory of *monads*. Monads, the word and idea, can be best pictured if one imagines Spinoza's *only one substance* (God) divided and dispersed to innumerable *individual substances*.[7] His proposal can be regarded as a modification of *occasionalism* developed and elaborated by the late Cartesians.

Leibniz's monads can be investigated in a four-way manner, as suggested by Störig (Störig, 1985, 337): 1) Monads are *points*, that is, the very fundament of beings is consisting of point-like substances. This entails that beings are not parts of the same, single continuum. Leibniz states that matter is actually not a substance expanded in space, all of our knowledge deriving from sensational data is false, a mere illusory complex of sensuous impressions (Leibniz, 1989b, 643). 2) Monads can also be considered as *forces*, or *centers of forces*. According to this, a physical object is a complex of point-like centers of forces (Leibniz, 1989b, 643). As we will see in a later chapter, this view was also supported by Kant and Schopenhauer, as well as by the eighteen-nineteen century findings of natural sciences. 3) Monads are also *souls*. Leibniz describes these point-like substances as spiritual/mental/soulful units.[8] However, the degree of „perfection" is considerably different amongst the monads leading to a hierarchical ordering in Leibniz's system.[9] Lower monads exist in a dream-like state, while higher-order monads (such as human beings) possess higher mental faculties with more elaborated ways of perception. Thus, in each case, the degree of perfection corresponds to psychic abilities, and God (the ultimately superior, highest order monad) has infinite consciousness and considered as an omniscient, single substance. 4) Each monad is an *individuality-on-its-own*. There are no two identical

[7] Though he held Spinoza's views in high regard, he himself says later in life: *„(A)ccording to Spinoza… there is only one substance. He would be right if there were no monads."* (Leibniz, 1989a, 663)

[8] Leibniz distinguished three main classes of monads: "There are, in the first place, three great classes in the hierarchy of monads, not sharply distinguished, but merging into each other. These are bare monads, souls and spirits. Bare monads, which are also called forms or entelechies, have the minimum of perception and desire; they have something analogous to souls, but nothing that could strictly be called a soul. Souls are distinguished from the first class by memory, feeling, and attention (1). 190–1; G. vii. 529; D. 220; L. 230; G. vi. 610). Animals have souls, but men have spirits or rational souls. Spirits include an infinite hierarchy of genii and angels superior to man, but not differing from him except in degree. They are defined by self-consciousness or apperception, by the knowledge of God and eternal truths, and by the possession of what is called reason. Spirits do not, like souls, mirror only the universe of creatures, but also God." (Russel, 1992, 165)

[9] Here, Leibniz relies on the Greek etymology of the word *entelecheia*, that (roughly) refers to the *degree of soulful-ness*, or ability of perception (Leibniz, 1989b, 644).

monads. They perfectly fit in the ultimate cosmological hierarchy, each of them mirrors the world on its own, individual way. Any of them can be seen as an unique reflection of the Universe (Leibniz, 1989b, 644-648; Leibniz, 1989c, 308). Finally and importantly, in Leibniz's system, matter appears as a fractal-like entity exhibiting properties of its infinitesimal parts.[10] There is no direct communication between the monads but their interaction is regulated by the pre-established harmony or *Harmonia Praestabilita*:

> „(§78) These principles have given me a method for explaining naturally the union or better, the conformity of the soul and the organic body. The soul follows its own laws, and the body its own likewise, and they agree with each other by virtue of the harmony pre-established between all substances, since they are all representations of one and the same universe.
>
> (§79) Souls act according to the laws of final causes through their appetitions, ends, and means. Bodies act according to the laws of efficient causes or the laws of motion. And the two kingdoms, that of efficient and that of final causes, are in harmony with each other." (Leibniz, 1989b, 651)

As we have seen, Leibniz surmised that there are infinitely many substances acting individually in a predetermined manner. This is the so-called *pre-established harmony,* which was supposed to solve the mind-body problem in a metaphysical way. While Descartes absurdly tried to connect body and soul via a physical organ (the pineal gland, i.e. res extensa itself), in Leibniz's system true substances were expounded as metaphysical points that could also be regarded as real and exact entities. The interaction of mind and body was pictured as a kind of *synchronized activity* between the two. Descartes was on the horns of a dilemma as he could not deny that his two substances corresponded in some way what he could not explain because of the radically dissimilar nature of *res cogitans* and *res extensa*.[11] Later, occasionalists made

[10] „Each part of matter can be thought of as a garden full of plants or as a pond full of fish. But each branch of the plant, each member of the animal, each drop of its humors, is also such a garden or such a pond." (Leibniz, 1989b, 650)

[11] It is tempting to use Kuhn's and Feyerabend's famous term „incommensurability" here, in a quite anachronistic way, to describe this problematic relation. They independently introduced the term to the philosophy of science in 1962. Briefly, *incommensurability* is defined as the absence of a common unit of measurement that would grant an exact/direct basis for

significant efforts to give an alternative explanation to the Cartesian problem of mind-body interaction. They proposed that it is God who „supervises", „corrects" and „harmonizes" the interaction between body and mind, over and over again during action. Leibniz agreed with them that there could not be causation between two distinct – may we say incommensurable – substances, rather he assumed that the illusion of causation is directly and necessarily emerging from the pre-established harmony, which is produced immanently within the interacting substances. God created the two substances (i.e. body and mind) in a way that they are following their own laws, yet – through divine intervention – they remain in synchrony and *coincide with each other*, so they *preceived to be* in interaction (Störig, 1985, 338-339). A common theoretical conclusion between Leibniz and Spinoza regarding dualism is that, in their system there is no need for perpetual intervention of God. Leibniz needed only "one original miracle" to actuate the clocks (Russel, 1992, 160).[12] The most intriguing aspect of the theory of monads is that the body becomes the appearance of the infinite collection of monads. But our soul is a dominant monad in the system because it has clearer perceptions than the others; this distinguished monad is active while the others passive. The upshot is that the soul dominates the body (Russel, 1992, 165). Despite parallelism Russel shows that there are signs of monism (a metaphysical union of soul and organic body) in Leibniz's philosophy. Leibniz tried to conjoin the passive *prima materia* with the active, form animating *entelechies* not only with a dominant monad but also by means of the concept of the *vinculum substantiale* that ensures the role of the immortal individual soul in the system.[13] According to Russel this step was required for Leibniz to persuade Catholics to believe in his monad-theory and to explain the doctrine of transmutation with his own terms (Russel, 1992, 179). In sum, we can distinguish two main theories regarding the mind-body relation: 1) The organic body composed of changing monads acquires unity be the – quiet mysterious – dominant monad owning to

---

measurement or comparison of two separate variables/entities (e.g. the *length* and *weight* of a metal ingot).

[12] Russel contends that the search for harmony is basically a Cartesian heritage: "We may suppose that Leibniz began with the Cartesian problem of the harmony of soul and body, and found in his doctrine of monads a far wider harmony by which far more was explained." (Russel, 1992, 160)

[13] Brandon Look underscores the paradox that the hypothesised independent *vinculum substantiale* is in contradiction with parallelism: "Further, in order to unify the various monads in a composite substance, this substance-like thing would have to be capable of exercising real causal powers on other substances. Yet such causal efficacy is inconsistent with Leibniz's most strongly held views concerning the relations of substances." (Look, 2000, 220)

its clearer perceptions; 2) Mind and body make one unified whole by means of a substantial bond (Russel, 1992, 175-178).

It is worth to mention that Spinoza offered another alternative to resolve the problem of mind-body dualism in the seventeenth century influencing Leibniz in several ways. His system included God as the ultimate basis of existence, and explained mind-body interaction in a simple way. He stated that, in fact, there is no difference between body and mind. There is only God, and body and mind are but *attributes* of this only substance, since God can manifest himself either as thinking or as extension in space. This type of monistic approach to the problem is often called as *dual-aspect monism* within the circles of philosophers of mind. Besides interactionism and psychophysical parallelism, *monism* represents the third way to resolve the mind-body problem and became an important theory in modern philosophy after Spinoza and Descartes. The above mentioned main theses regarding mind-body dualism are the historical antecedents of the main problems of philosophy of mind and contemporary consciousness studies. Around the end of the 20th century physicalist and naturalist mind-conceptions tried to ultimately eliminate the lurking problems of mind-body dualism. However, there is an innate paradox in the science of consciousness: the aim of this interdisciplinary project was to establish a neuroscientifically demystified theory of the mind but certain philosophical qualms (Nagel, 1974; Chalmers, 1995) always eventuated heated debates about the problem of mind-body dualism, and the incommensurability of physicalism and the first personal phenomenological experience. In essence, we have to keep in mind that the discussion of mind-body dualism and physicalism in a wider context is based on the opposition of the mechanical and phenomenological descriptions of mind. And this is the main idea that was recognized by Kant in the 18th century. In the following section let us see the Kantian alternative to the mind-body relation.

2.3 The Kantian reflection on the mind-body problem

Kant's critique of the Cartesian model of subjectivity opened a new era in the philosophy of mind about a century after Descartes. He criticized materialism, and both Cartesian dualism and the Leibnizian pre-established harmony in a very sophisticated way. Kant mostly rejected metaphysical materialism, the type of materialism that is

engaged with the questions or possibilities whether matter can think. As another popular idea to resolve the question of mind-body interaction in the age of Kant, the proponents of this kind of materialism claimed that virtually all mental phenomena could be reduced to matter or a physical substratum (Sturm and Wunderlich, 2010, 50-51). In the 17th and 18th centuries, the predominant philosophical view about mind-body relations was Descartes' dualism, and only a few thinkers followed materialism. Some of the philosophers rejected materialism or both materialism and immaterialism, such as Locke and Hume, respectively. Kant defined his position as one who rejects *all theories*, which, being either material or immaterial, try to reduce the human mind to a single substratum. By using some of the main works of Kant and his interpretators, I will try to briefly show in this chapter that his main idea of the „substratum of consciousness"[14] is a mixed one, which involves several aspects (both mind and body) of the thinking subject as a *being*.

Cartesians state that subjectivity (roughly speaking: „our inner life") has an ultimate ontological character, that is our thoughts and experiences form the „stuff of reality" without requiring the reality of external objects (of the thoughts and experiences). Kant's first major criticism is based on his fundamental distinction of the subjective-objective: these two realities are presupposing each other, subjectivity is not conceivable without objectivity, and *vice versa*. To make an epistemologically correct statement about any content of our inner life, these contents must have a certain, objective character with necessary external existence. Thus, Kant argues in his *Principles* that „experience would be impossible if its objects were not in their own right quantifiable, substantial, causally inter-related, and so on" (Schwyzer, 1997, 342). This relation of two realities, the subjective inner world of conscious states and the objective outer world of extension (i.e. things in space), are in the focus of Kantian epistemology. As we have discussed earlier, Descartes, in the first and second *Meditations*, only endowed the world of subjective reality with true existence. Kant insists that subjectivity can be explored only if the realm of objective reality is known, since thoughts and experiences are actually based on the spatial world. According to him, subjectivity lacks the creative capacity to completely and independently build an objective outer world, as in the Cartesian model. This does not entail that Kant denies

[14] Kant frequently used the concept of *consciousness* (*Bewusstsein*), and – according to many experts in the field – his use of the term is compatible/synonymous with such terms as „mind" or the „soul" (reviewed by Sturm and Wunderlich, 2010; see particularly p. 49).

the existence of subjectivity, nevertheless, in his philosophy the first-person point of view does not constitute the realm of physical objects *per se* (Schwyzer, 1997, 343-344).

Kant was familiar with the philosophy of Leibniz as it became evident in the *Critique of Pure Reason* and in his early writings concerning the philosophy of natural science (Kant, 1998; 2012). He addressed the questions of Leibnizian substance, perception, and the human mind-body problem in his works. Leibniz purported that a subject („I am") is a substance, and the mind itself is a monad, which is controlling and ruling over the body (an aggregate of inferior monads). Perception is occuring through the sensory organs that collect and array perceptual data about the external world relaying them to the soul so it can experience them. There is a severe debate over the nature of the Leibnizian „I", whether it is a composite substance consisting of body and soul, or an immortal and indivisible, single monad residing out of the limitations of space and time. Kant says that the „I", in fact, refers to a single entity, a combination of thoughts and perceptions as they are connected and conjoined. As mentioned above, the pre-established harmony assures the (non-causal) interaction of body and mind in Leibniz's philosophy. Kant criticizes here the explanatory imbalance between the theory of monads and pre-established harmony:

> "Why should one admit bodies, if it is possible that everything happens in the soul as a result of its own powers, which would run the same course even if entirely isolated?" (Kant, 1998, 249).

Initially, Kant rejected the ideas of occasionalism and pre-established harmony and preferred dualist theories of mind-body relations, but finally concluded that dualism was hypothetically incongruent. In his early work, *Living Forces*, he struggled with the problem of consciousness (soul) and its location and operations in the body (Kant, 2012). Contemporary scientists, anatomists, and philosophers had ruminated over the site of interaction between mind and body for a long time. They mainly placed this very site inside the brain (e.g. pineal gland for Descartes, the *corpus callosum* for Euler, etc.), but Kant believed that minds were not localized spatially, so neither natural science nor metaphysics alone could solve the conundrum. For Kant, it was impossible to understand the nature of the soul/mind while separated from the body (e.g. after death), since the two – body and mind – did exist in a combined, conjoined way. Thus,

epistemologically, it is completely nonsense to speculate about the „properties" of the soul/mind as a separate entity as „we cannot know what a separated soul would experience" (Wilson, 2012). Leibniz tried to explain the means of afterlife existence with such examples as deep sleep or fainting, but in Kant's opinion, the situation was „like standing before a mirror with your eyes closed to see what you look like when you are asleep" (Kant, 1969, 309; Wilson, 2012).

Kant's early, pre-1770 philosophy reflected to the mind-body problem by intoducing the theory of „physical influx".[15] In his Critical philosophy, one of Kant's main goals was to elucidate the nature and give an explanation to the mind-body problem. According to his point of view, the mind is not a distinct entity separate from the physical body, rather an *aspect* or „manifestation" of it, observed from an explicitly human perspective. As discussed above, Kant's view of the mind does not depict it as something that creates the physical world, but, conversely, the corpus of pure knowledge of „external" objects is ineluctably constituted by unconscious factors concerning the physical world. Reading the *Critique of Pure Reason*, many philosophers incline to conclude – at least partially – that Kantian transcendental idealism necessitates some form of mind-body dualism. As Kant explicitly asserted that space and time are but mere mental constructs, *a priori* „forms of intuition", and there is a clear distinction between the *phenomenal* and *noumenal* worlds, demonstrates his adherence to the legacy of Descartes (Russell, 1967, 558). In the last few decades, however, many Kant scholars have been able to demonstrate that Kant was up against the Cartesian tradition as far as the mind-body dualism was concerned (Collins, 1999, 5-9; Palmquist, 2011). In Kant's philosophy, what appears to be an ontological dualism – characterized by the noumenal and the phenomenal – is, in fact, an illusion of *perspectives.* The seemingly two distinct worlds are but two different perspectives or aspects of the same world: our mundane, ordinary reality (Allison, 1983). In his book *Kant's System of Perspectives*, Palmquist gives an outstanding framework of this perspectival approach pointing out that, in his Critical System, Kant's ultimate goal was to express and formulate a theory of human nature as an undivided whole (Palmquist, 1993). Several recent studies demonstrated that the topic of mind-body interaction stood in the focus of Kant's pre-1770 philosophical inquiry. Most of these authors argue that

[15] The physical influx theory proposes *causation* between body and mind. This concept challenged the other two, formerly discussed, dominant doctrines of 17th and 18th century: occasionalism and Leibniz's pre-established harmony.

Kant's philosophy was centered around the body and, especially in his mature Critical period, his system was essentially non-dualistic (Laywine, 1993, pp. 52 & 159; Lakoff and Johnson, 1999; Shell, 1995). It is important to emphasize that none of these authors would claim that Kant was a pure physicalist, although his attitude pointed to that direction and his late Critical philosophy – considering several of its aspects – was consistent with mind-body identity.

In his earliest writings, Kant introduced the theory of physical influx (see above) where the soul is characterized by quasi-material properties (Laywine, 1993, 25-42). This theory was revised in a later work, *Dreams of a Spirit-Seer Elucidated by Dreams of Metaphysics (1766),* in which Kant investigates the importance of the question: can be the „soul" (or mind and mental faculties) localized in the body, and whether the brain plays any role in thinking?

> „The body, the alterations of which are *my* alterations – this body is *my* body; and the place of that body is at the same time *my place*. If one pursued the question further and asked: Where then is *your* place (that of the soul) in this body? Then I should suspect there was a catch in the question. For it is easy to see that the question already presupposes something with which we are not acquainted through experience, though it may perhaps be based on imaginary inferences. The question presupposes, namely, that my thinking 'I' is in a place which is distinct from the places of the other parts of that body which belongs to my self. But no one is immediately conscious of [occupying] a particular place in his body; one is only immediately conscious of the space which one occupies relatively to the world around. I would therefore rely on ordinary experience and say, for the time being: Where I feel, it is there that I am. I am as immediately in my finger-tip as I am in my head. It is I myself whose heel hurts, and whose heart beats with emotion… No experience teaches me to regard some parts of my sensation of myself as remote from me. Nor does any experience teach me to imprison my indivisible 'I' in a microscopically tiny region of the brain, either so as to operate from there the levers governing my body-machine, or so as myself to be affected in that region by the workings of that machinery." (Kant, 1992, 324-325)

As we have seen, Kant's idea of mind-body interaction was very close to anti-dualism exhibiting a convergence of almost complete spectrum of bodily (physical) references to

thoughts and mental operations. As Palmquist writes, in the aforementioned passage „… he (Kant) is here identifying his *awareness* of that 'I' with his awareness of his *body* and explicitly states that the 'I' itself might be a product of merely 'imaginary inferences' – a position tantalizingly consistent with EM (eliminative materialism).[16] Taking this hint as a starting-point, I shall argue that, far from being simply a further development of Cartesian dualism, Kant's Copernican revolution in philosophy advances an alternative to *any* form of mind-body dualism by demonstrating that, from the point of view of any legitimate natural science, *I* just *am* my body" (Palmquist, 2011, 7).[17] In accordance with this, in the *Transcendental Aesthetic*, Kant contends that space and time are „forms of intution" and should not be considered as systems of relativity (as Leibniz argued), or absolute schemes of reality (the traditional Newtonian worldview). Here, he does not defend Berkeley's standpoint,[18] but creates an idealism based on an entirely different ground that involves *bodily functioning* in the perception of *external objects*. In this regard, the Kantian „intuition" refers to the qualitative nature of sensory data and the „forms of intuition" are „an account of the structure of our embodied perspective" on the world (Palmquist, 2011, 9; Rukgaber, 2009, 166-167). Kant's major thesis in the Aesthetic is that „The forms of intuition are not mental operations performed on sense data but are the formal structure of spatio-temporal relations in which objects stand in relation to the body." (Rukgaber, 2009, 185).[19] This bodily foundation of mental operations can be tracked through the whole body of the *Critique*. In the *Transcendental Analytic of Concepts*, Kant describes human

[16] *Eliminativism* in its most radical form advocates the complete abandonment of the psychological and mental vocabulary in sake for the scientific (especially neuroscientific and cognitive) language. Exemplary writers of eliminativism are Richard Rorty, Patricia and Paul Churchland (Maslin, 2005, 305). The concomitant upshot of eliminativism is that the Self and consciousness deemed to be mere (cognitive) illusions.

[17] Naturally, the situation – especially in the epistemological sense – is far more complicated. This physical vessel, that is also *me* at the very same time, is giving rise to *transcendental knowledge* whose validity is completely independent of my bodily nature. If we take Kant's perspectival interpretation into account, we see that some form of this transcendental knowledge allows a non-dualistic standpoint.

[18] Where space and time have no ontological and epistemological validity outside human perception. See the first passage of Kant's *Refutation of Idealism* in the first *Critique*, where Kant refutes those of his contemporaries who erroneously identified his transcendental idealism with Berkeley's empirical idealism (Kant, 1998, 326).

[19] It might be important to note (especially when dealing with the topic from the perspective of philosophical psychology) that unlike Descartes, Kant argues that space and time (as forms of intuition) frame an unique epistemological nexus in which we can classify senses as *outer sense* and *inner sense*. Both are portrayed as crucial and regulated by human intuition in a spatio-temporal fashion.

imagination as the ability to make concepts from the non-organized, pre-conscious psychic content provided by the „manifold of intuition". Importantly, this „manifold" signifies bodily functions and Kant illustrates the process as the following: „(1) the *synopsis* of the manifold *a priori* through sense; (2) the *synthesis* of the manifold through imagination; finally (3) the *unity* of this synthesis through original apperception." (Palmquist, 2011, 10-11). The body plays an indispensable role in each step. The first one is purely bodily, since the *a priori* forms of intuition directly *emanate from our body* as it encounters with the physical world that surrounds it. In the second step, though Kant does not directly allude to it as such, the brain synthesizes bodily sensations and shapes *images* from them.[20] The third step means the *de facto* fusion of „image-data" to produce knowledge, and is effectuated and executed by a mental power called „apperception", that is „a metaphorical 'perception' of one's self as a knowing subject".[21] Since Kant refers to this power or mental faculty as the sense of „I" (or even „ego") it is very easy to confuse his philosophy with Cartesian dualism. However, in Kant's system, this sort of apperception is purely transcendental. The *transcendental ego* is purely ideal, non-substantial, it does not have a spatio-temporal existence so it cannot be considered as a psychic correlate to our bodily existence. Every image that have been generated by my imagination (via the steps mentioned above) eventually appears as *my image*, and becomes *my perception* when is getting situated in a given domain of concatenated sensory cues emerging from the body (sense organs).

Kant explicitly rejects the Cartesian idea that the soul is a substance, which is independent from and commensurate to the body.[22] He substitutes Descartes' soul with the *transcendental ego*, which is – similarly to the body – limited in space and time.[23] Several other elements of Kant's system is also strongly body-centered; the best example can be found in the *Refutation of Idealism* section of the first *Critique* where Kant argues that human self-awareness is grounded in the body, arising primarily from our bodily experiences (Kant, 1998, 326-333). However, we must recall here Kant's reminder concerning the metaphysical illusions in philosophical investigations, which

[20] In the second edition of the *Critique*, Kant further differentiates this second mental operation separating „productive imagination" from „reproductive imagination". The first one is referring to the primary, sensation-based images, while reproductive imagination involves a re-producing process and therefore correlates with normal mnemonic events (i.e. memories).
[21] Palmquist, *ibid.* 11.
[22] In the *Transcendental Dialectic* (the first *Critique*'s first chapter; Kant, 1998).
[23] It is worth to mention that, as it is elucidated in the first *Critique*, the transcendental ego stands closer to the inner sense (introspection) than to the outer sense (external sensory perceptions), and is consequently „somewhat more" limited in time than in space.

can be avoided only if we learn *perspectival thinking* (Kant, 1998, 45-46). In doing so, we must recognize that when ideas are emerging in our mind they may harbor meaning self-evidently from one (explanatory) perspective even though from another perspective (physical or substantive) the object of that very same idea does not actually exist (Palmquist, 2011, 14). According to Kant, it is a severe mistake to focus our attention *exclusively on the brain* when examining mind-body relations. As Palmquist puts it: „… Kant thought it was a fundamental mistake to assume that 'I' somehow *live in* my *brain*. The brain's functions may be – nowadays we can say *are* (at least as far as we know) – essential to the experience of what we call 'mental states'; but to hold out the hope that the mind will someday be *reduced to* the brain is no more plausible today than was the hope of *locating* the soul in the brain in the days of Descartes and Kant. Ironically, on this point the typical eliminative materialist is in danger of looking more like Descartes than Kant does!".[24] Apparently, it was very important for Kant to take the *whole body* into account when discussing about the mind (Lakoff and Johnson, 1999, 416).[25] It seems to be a sound presumption that Kant was very close to the modern idea of *Embodiment* and embodied cognition. His late works support the ideas of the 20-21st century philosophers claiming that the body plays a vital role in the *constitution* of human consciousness (including but not restricted to self-consciousness as it is grounded-in-the-body). For Kant, the synthetic unity of apperception includes the self-awareness of existence, but also involves the *experiential features* of the „I" *in/through the body* (the „manifold").[26] Thus his late philosophy concerning the mind-body problem – based on an essentially *synthetic-experiential concept* – could be considered as a forerunner of modern Embodiment theories, which will be discussed later in this

[24] Palmquist, *ibid.* p. 14.

[25] Palmquist, *ibid.* p. 15: „In other words, it is not and never will be *the brain on its own* that turns out to be smarter than it is complicated, but rather, the brain and body functioning as a creative feedback loop and thereby defining the *whole person*."

[26] „Consciousness of itself (apperception) is the simple representation of the I, and if all of the manifold in the subject were given self-actively through that alone, then the inner intuition would be intellectual. *In human beings this consciousness requires inner perception of the manifold that is antecedently given in the subject*, and the manner in which this is given in the mind without spontaneity must be called sensibility on account of this difference. *If the faculty for becoming conscious of oneself is to seek out (apprehend) that which lies in the mind, it must affect the latter, and it can only produce an intuition of itself in such a way, whose form, however, which antecedently grounds it in the mind, determines the way in which the manifold is together in the mind* in the representation of time; there it then intuits itself not as it would immediately self-actively represent itself, but in accordance with the way in which it is affected from within, consequently as it appears to itself, not as it is." (Kant, 1998, 189-190; *italics added*)

paper. However, an important limitation here is that Kant does not take a step further to *imbue the body with ontological value in constituting consciousness*. His approach is purely epistemological, abstract and idealistic, therefore his ideas are not directly comparable with the body concept of modern embodiment theorists, such as Gallagher, Zahavi, Thompson or Varela. Nevertheless, we may regard Kant's contribution to the topic as part of his Copernican revolution in understanding mind-body relations shedding light on the problem from an extraordinarily new and gripping perspective.

2.4 Schopenhauer's account of the nature of mind and body

What Kant donated to the later generations of thinkers about his concept of the human mind was extremely important in the development of modern mind-body theories. His main ideas were criticized and refined by one of the later philosophers, Arthur Schopenhauer. Most importantly, Schopenhauer is the first philosopher of his time who points out that our own body is not only the starting point of our perception, but „*I am myself rooted in the world*, and my body is not just one object among others, but has an active power of which I am conscious" (Kenny, 2010, 766; *italics added*). In the following part of this chapter, my humble attempt is to show that Schopenhauer's philosophy about mind and body – partially based on Kant's concepts – might be seen as a harbinger of modern theories in embodiment and phenomenology.

To understand the very roots of Schopenhauer's critique on Kant's system concerning mind-body relations, we first need to have a brief look at his epistemological stance *vis-a-vis* Kant's. Schopenhauer disagreed with Kant that the unknowable thing-in-itself (*Ding an sich*)[27] could be the cause of our sensations. However, knowledge can be obtained causally in this manner only when it is applied to experience. Schopenhauer rejects the idea that something exists outside our experience (i.e. epistemologically non-available) as the underlying cause of it. Thus he identifies the mind-independent thing-in-itself (the noumenal aspect) as an internal epistemological and ontological problem in Kantian philosophy. In his main work, *The World as Will and Representation*, he discriminates between „Will" (*Wille*) and

[27] In Kant's philosophy, the concept of noumenon is usually linked with the unknowable "thing-in-itself" (Ding an sich or "thing-as-such") as generally accepted by many Kant scholars, although, the nature of their relationship is still a subject of debate (Wicks, 2008).

„representation" (*Vorstellung*) as the double-aspect ontological basis of the world. In Schopenhauerian philosophy, there is no causal relation between Will and representation (that is, Will *does not cause* our representations) but they are the *same reality* as mainfested from different perspectives. They relate to each other as, e.g. the universal force of electricity and its manifestation, a spark, as a possible object of examination (Schopenhauer, 2010, 149). His main idea is that „the relationship between the thing-in-itself and our sensations is more like that between two sides of a coin, neither of which causes the other, and both of which are of the same coin and coinage." (Wicks, 2011). Furthermore, he explicitly links human reason (*Vernunft,* mind, or as he calls it the „principle of individuation" [*principium individuationis*]) with the fabric of the universe (space and time). He uses the principle of individuation to express the *interdependence* of mind and the physical world.[28]

His general approach to the mind-body problem expresses the same features. He believes that Kant and Locke fundamentally misinterpreted the nature of consciousness when exclusively focusing on the subjective aspect of mind (i.e. on the first-person view). The complete picture, the appropriate way of examination must also include the „objective way of intellect" (i.e. the physiology of consciousness) in a complementary fashion:

> „We shall become most vividly aware of the glaring contrast between the two methods of considering the intellect which in the above remarks are clearly opposed, if we carry the matter to the extreme, and realize that what the one as reflective thought and vivid perception immediately takes up and makes its material, is for the other nothing more than the physiological function of an internal organ, the brain." (Schopenhauer, 1969, 273)

It is important to emphasize, however, that – for him – this does not mean at all that consciousness could be reduced to „a function of the brain", because the objective view does not cause/generate the subjective view, rather the two *complement each other*. The

[28] This thought is manifested in the second book of his main work (*The world as will, first consideration. The objectivation of the will*): „It is a perennial philosophical reflection that if one looks deeply enough into oneself, one will discover not only one's own essence, but also the essence of the universe. For as one is a part of the universe as is everything else, the basic energies of the universe flow through oneself, as they flow through everything else. So it is thought that one can come into contact with the nature of the universe if one comes into substantial contact with one's ultimate inner being." (Schopenhauer, 2010, 119; Wicks, 2011)

best account of the human mind includes both elements, none of which exlcude the other (Schopenhauer, 1969, 272-277). Schopenhauer's position about the question of mind-body interaction is therefore explicitly antagonizes with Cartesian dualism, exhibits similar ontological characteristics than that of Spinoza's dual-aspect monism, and partially dissimilar as far as Kant's philosophy is concerned. For Schopenhauer, consciousness „contains" both the sheer wildness of Will and the rational, individualistic principle of representation. In his system, however, Will emerges as an essentially non-rational, purposeless *instinctual drive*, which is – at the same time – the *very fundament of everything*, as it is (Schopenhauer, 2010, 139 & 186).[29] To further elucidate the nature of Schopenhauer's Will as a non-directed, instinctual force, we can compare his idea to Edmund Husserl's and Jean-Paul Sartre's concept of consciousness (Bernet, 1996).[30] Very briefly, they claim that „intentionality" is the main feature or „signature" of consciousness: consciousness always entails being *conscious of* something, where the object can even remain undetermined. Furthermore, intentionality always possesses *directedness*, but also the exact direction of this conscious action may remain totally unspecified. The main aim is therefore to characterize consciousness or the conscious experience in general. Therefore, in the context of the previous paragraphs, „… we can describe Schopenhauer's thing-in-itself not only as the form of all willing, or as a kind of purposiveness without a purpose, but as exhibiting the bare form of intentionality, or the bare form of consciousness." (Wicks, 2008, 86-87).[31]

Unlike Kant's synthetic theory about the soul-body, Schopenhauer asserts that there is only one, single object in the universe – relative to every one of us – that manifests two, absolutely different aspects: our *body*. On the one hand, the body emerges in our subjective experience as a representation (external aspect), but, on the other – and at the very same time –, also as Will (internal aspect). So any action of the body is, in fact, the objectified act of Will as it *appears via perception*. As Wicks summarizes brilliantly: "Having rejected the Kantian position that our sensations are caused by an unknowable object that exists independently of us, Schopenhauer notes importantly that our body — which is just one among the many objects in the world —

[29] Later, when discussing about psychoanalysis, we will see that Will clearly parallels with some aspects of the *unconscious* as it appears in the analytical system of Freud.
[30] Husserl's phenomenology will be discussed exhaustively later in Part One (see in *chapter 2.5.1*).
[31] For more about Schopenhauerian consciousness in the context of Husserlian phenomenology, see Wicks' book *Schopenhauer* (Wicks, 2008), and Bernet's essay (Bernet, 1996).

is given to us in two different ways: we perceive our body as a physical object among other physical objects, subject to the natural laws that govern the movements of all physical objects, and we are aware of our body through our immediate awareness, as we each consciously inhabit our body, intentionally move it, and feel directly our pleasures, pains, and emotional states. We can objectively perceive our hand as an external object, as a surgeon might perceive it during a medical operation, and we can also be subjectively aware of our hand as something we inhabit, as something we willfully move, and of which we can feel its inner muscular workings." (Wicks, 2011). However, only the body has this double-aspected nature in our experience, but no other objects in our field of perception. For example, as Schopenhauer points out, a chair or a tree before my eyes reveal only their objective aspect to my cognition: they remain mere representations. Unlike this situation, when I try to touch *that chair* or *that tree* with my hands, it always happens *through my body*, during which process my body reveals both its external and, at the same time, its inner metaphysical side to me. How is it possible then to experience both the internal and the external sides of one of my representations (i.e. my body), while I have only access to the external part in case of others? Schopenhauer identifies consciousness as a key concept here: every beings in the universe must be double-aspected, and my consciousness that reveals this principle to me as it is manifested in and through my body:

> „Every true act of his will is immediately and inevitably a movement of his body as well: he cannot truly will an act without simultaneously perceiving it as a motion of the body. An act of the will and an act of the body are not two different states cognized objectively, linked together in a causal chain, they do not stand in a relation of cause and effect; they are one and the same thing, only given in two entirely different ways: in one case immediately and in the other case to the understanding in intuition. An action of the body is nothing but an objectified act of will, i.e. an act of will that has entered intuition. Furthermore, we will see that this is true of all bodily motion, not just motivated action, but even involuntary acts in response to simple stimuli; indeed, that the entire body is nothing but objectified will, i.e. will that has become representation." (Schopenhauer, 2010, 124-125)

Schopenahuer is the first amongst modern philosophers whose system bestowed the *body with ontological importance in the constitution of human consciousness*. As we

have seen, in the Schopenhauerian system the body is not only added to our internal, subjective experiences as a Janus-faced entity but includes – integrates – *intentionality*, as well. It may not be a far-fetched idea to suppose that these aspects of Schopenhauer's notions about mind-body relations are compatible with the main tenets of Embodiment, that is our body is not a mere vehicle for our mind, but an agent that is indispensable in the *constitution of conscious experience* as far as its phenomenological features and intentionality are concerned. This way, Schopenhauer's mind-body concept – also as an elaborate answer to Kant's original ideas – may be considered as a philosophical precursor for the modern theory of embodied mind based on Merleau-Ponty's and others' works (Carbone, 2004). Additionally, Schopenhauer's philosophy of consciousness offered an entirely new approach to the human mind as it not only refutes Cartesian dualism but indirectly vetoes materialistic metaphysics, as well. Materialism primarily claims that mental states are based on brain processes that are, as such, dependent on physical laws. Physical laws are, on the other hand, governed by causality and necessarily predictable. Schopenhauer's understanding of the human mind-body relations does not legitimate this assertion.

2.5 Phenomenology and Embodiment as new levels of description and explanation

According to the modern philosophers of mind, a reasonable theory about consciousness must include two main features: 1) it must take the first-personal givenness of consciousness into consideration, moreover, 2) it has to account the difference between self-consciousness (our awareness of ourselves) and consciousness-as-an-object of examination. Such a theory must take into account and be able to explain the difference between *self-consciousness* and *intentionality* (defined by the epistemic contrast that stands between the subject and object of experience). Based on Kant's and Schopenhauer's ideas, Franz Brentano claims that all „psychic phenomena" (i.e. mental states) are always conscious *of* something (object), that is they have *intentional directedness* (Brentano, 1995, 99-106; Zahavi, 2004a). This intentional directedness, or intentionality (discussed shortly above in *chapter 2.4*), is the feature of human consciousness introduced by Brentano in the 19th century. Brentano provides a context favorable for the analysis of Husserl's works. He not only emphasized the intentional nature of human consciousness but also pointed out the ways descriptive

psychology could help to describe and explain different intentional mental states. His main work, *Psychology from an Empirical Standpoint*, was crucial in the establishment of the programme of phenomenology by Husserl and others. In the following, we will first discuss the birth of phenomenology and its characteristics, then we will focus on Embodiment as a sub-discipline of modern phenomenology and consciousness studies. The aim of this chapter is to seek for possible implications of phenomenology and Embodiment in consciousness research and in multidisciplinary investigations concerning the mind-body problem.

2.5.1 Husserl's phenomenology: reconsidering the mind-body problem

One of Husserl's main work, *The Crisis of European Sciences and Transcendental Phenomenology* (1936), is often considered as the culmination of his philosophy in which he attempts to give a historical, scientific, and philosophical account of human consciousness. By „the crisis of European humanity" Husserl mostly meant the crisis of *sciences* and *rationality*. He determined the Cartesian distinction between the subject and the physical world as the root of modern rationalism, and drew attention to the fact that rationalist and empiricist philosophies completely failed to properly address the question of *subjectivity*. Moreover, Kantian philosophy and the programme of psychology were also unable to adequately solve the *enigma of subjectivity.* Psychology was supposed to become the „universal science of the subjective", but Husserl recognized this scientific tendency as an alienation from the enigma of subjectivity and as a failure or „crisis" of psychology. Husserl argues in favour of the anatomy of the subjective realm: "It is a realm of something subjective which is completely closed off within itself, existing in its own way, functioning in all experiencing, all thinking, all life, thus everywhere inseparably involved; yet it has never been held in view, never been grasped and understood." (Husserl, 1970, 112) He even put is as „the history of psychology is actually only a history of crises".[32] In the *Idea of phenomenology* (1999b) and several other works he vehemently criticizes the atomism of experimental psychology. While the starting point of phenomenology is the first personal perspective, Husserl painstakingly argues that phenomenology is not

[32] Husserl, *ibid.* p. 203.

searching for individual sense data, but the main task is to subtract (intersubjective) *eidetic forms* from the flow of experiences (Husserl, 1965 and 1999b). In the *Crisis*, Husserl states that, since the age of Enlightenment, rationality went awry with early modern philosophy as it became falsely associated with a certain approach of scientific method (Feest, 2012, 494):

> „[t]he reason for the failure of a rational culture… lies not in the essence of rationalism itself but solely in its being rendered superficial, in its entanglement in 'naturalism' and 'objectivism'" (Husserl, 1970, 299)

Husserl initially believed that human sciences would be able to show a way out of this conceptual darkness, however, he later had to conclude that:

> „Blinded by naturalism (no matter how much they attack it), the humanists have totally failed even to pose the problem of a universal and pure humanistic science and to inquire after a theory of the essence of spirit purely as spirit." (Husserl, 1970, 273)

Thus – after renouncing the principles of existing human and natural sciences – he introduced his *transcendental phenomenology* based on novel philosophical foundations. Husserl's new philosophy is based on a method called *phenomenological reduction.* The reduction is a central concept in his oeuvre. Husserl frequently revises the theme, however, one can distinguish three main aspects of reduction: 1) reduction is similar to the Cartesian methodic doubt and the goal of reduction is to precisely characterize the arising phenomena in the phenomenal field; 2) the second aspect of the reduction is the examination of sense-constitution; as a result, the arising phenomena will be reduced to the transcendental ego that is the sphere or the pole of sense-making; 3) the most general meaning of reduction comes from antique scepticism. The *epoché,* the bracketing of beliefs demands that all judgements, opinions, and (especially ontological) beliefs about the world must be suspended and attention must be focused in such a way as intentional objects are constituted in consciousness (Christensen and Brumfield, 2010; Horvath, 2010, 21). In phenomenological analysis, epoché is a process during which – by blocking presumptions and biases – one is becoming able to explain and investigate a given phenomenon (a self-giveness in intuition) in its „phenomenal

purity" (i.e. considering its own inherent system of meaning).[33] The aim of the *epoché* is to maintain the attitude of a *participating observer* in the course of an intentional act (perceiving, remembering, imagining); the world is not desolating to mere illusion rather the *epoché* become a special attunement to glance at the basic subsoil of *apodictic evidences* in the intentional act.

Husserl accepted, and he himself believed, that the emergence of Cartesian dualism was a critically important point in the history of philosophy, however, he also contended that Descartes did not accomplish his own work. Husserl's main argument aims Descartes' method of radical scepticism: as it has already been mentioned in *chapter 2.1*, Descartes assumed a dualism between the pure ego and the physical world. Husserl, in turn, questioned how did this dualism acquire its self-evident status? He concludes that Cartesian dualism resulted from „abstracting away from experience to arrive at the notion of a physical world, which was to be described rationally by means of the language of pure mathematics" (Feest, 2012, 495). This is exactly the manner how natural science examines the physical world, and – in this sense – Descartes followed the way of Galileo. However, Descartes did not extend his methodological doubt to this scientific way of cognizance and, therefore, was not able to suspend it. Thus the Cartesian ego could not transcend the worldly preconceptions (Husserl, 1999, 24-25). Husserl's aim with his phenomenological method is to execute the epoché without getting epistemologically engaged with the naturalistic attitude. Rather he added the concept of „life-world" (*Lebenswelt*) ousting the naturalistic attitude from

[33] Phenomenological reduction and epoché are highly interconnected attitudes. „The epoché and the reduction can be seen as two closely linked elements of a philosophical reflection, the purpose of which is to liberate us from a natural(istic) dogmatism and to make us aware of our own constitutive (i.e. cognitive, meaning-disclosing) contribution to what we experience. Whereas the purpose of the epoché is to suspend or bracket a certain natural attitude towards the world thereby allowing us to focus on the modes or ways in which things appear to us, the aim of the phenomenological reduction is to analyse the correlational interdependence between specific structures of subjectivity and specific modes of appearance or givenness. When Husserl speaks of the reduction, he is consequently referring to a reflective move that departs from an unreflective and unexamined immersion in the world and 'leads back' (re-ducere) to the way in which the world manifests itself to us. Thus, everyday things available to our perception are not doubted or considered as illusions when they are 'phenomenologically reduced', but instead are envisaged and examined simply and precisely as perceived (and similarly for remembered things as remembered, imagined things as imagined, and so on)." (Gallagher and Zahavi, 2012, 24-25.)

phenomenology.[34] Husserl wanted to create a new philosophical project that produced a proper *transcendental analysis* for studying the intentional structure of subjectivity. This method would allow one to examine the way intentional objects are constituted in experience. But then, what could be the nature of relationship between the experiencing subject (empirical soul) and the transcendental subject of the analysis?

Husserl's transcendental turn is a very complicated topic in the paradigm of phenomenology. The aim of transcendental investigation is not only to reveal an abstract independent pole or sphere over and above the empirical realm and empirical self, rather it is the explanation of sense-making and also a critical attitude toward our own prejudices and beliefs. David Carr argues that the transcendental program is not a metaphysical doctrine (contrary to Heidegger's critique), rather a research program, furthermore, in case of Kant and Husserl the aim of the critique is happens to be the metaphysics of substance (Carr, 2010b, 183). The first appearances of the "pure ego" can be traced back to the second (1923) edition of the *Logical Investigations* and to the *Ideas I,* (1983) where transcendental consciousness become a "new region of being". This theoretical step is – according to Carr – the result of the methodological refinement of reduction; Husserl established a new way of looking to the phenomena (Carr, 2010, 186-188). However, the crucial question will be that where is the place of the body when the pure ego is an abstract pole of meaning-constitution or the sphere of apodictic truths? In this transcendental system the body and the bodily-ego are bracketed in the course of the *epoché*. Surprisingly, Husserl did not avoid the bodily and sensual aspects of the phenomenological method, and we will see that he anticipated several elements of Merleau-Ponty's philosophy in a fragmented way. Husserl's transcendental turn differs from the Kantian in many ways, notably he rejected Kant's idea of the transcendental ego as a „mythical construction" (Husserl, 1970, §30). The Husserlian transcendental ego – unlike the Kantian one – is an essentially self-reflective activity therefore in this mode of philosophical analysis one can obtain knowledge about the process of *ego-constitution in the life-world* (Husserl, 1999, 136; Zahavi, 2003, 74-77).

Naturally, when we conceptualize phenomenal consciousness from a scientific point of view, we basically have two options. We can observe phenomena as a naturalist scientist or from the *life-world's* point of view. The naturalistic way involves a special

[34] The term *Lebenswelt* had previously been used by Simmel and others at the time Husserl introduced it. Many of the social scientists after the Second World War used the term inappropriately as they were not familiar with the features the word has in Husserl's philosophy (Føllesdal, 2010, 27).

perception of the physical world: Husserl indicated that – in this mode – humans and animals appear as divided beings possessing two ontological „layers" (mental and physical), both which can be examined on its own, unique way. Husserl rejected the naturalistic approach exactly on the same grounds as he did in case of Cartesian dualism. He purported that this picture has already involved the existence of a physical world, separated from and independent of the mental realm. In transcendental phenomenology, however, we do not make abstractions when discussing about „souls" rather we start with the examination of „how souls – first of all human souls – are in the world, the life-world, i.e., how they 'animate' physical bodies" (Husserl, 1970, 211).[35] This means that from transcendental investigation the role of body is not necessarily excluded. For example Husserl in *Phenomenological Psychology* (1977) admits that our body is the "unity of perceptual organs" and we can see bodily phenomena from the aspect of spatial extension and subjective internality (Husserl, 1977, 150-151). In *Thing and Space* (1997) he speaks about the so called Ego-Body and comes up with the example of riding to demonstrate the co-constitution of the Ego-position, the inner kinaesthetic sensations, and the environment (Husserl, 1997, 240-244). By these ruminations he declares the *situatedness* of being and cognition.

So the Cartesian division of body and mind, in Husserl's opinion, was a great misunderstanding. From the Galilean-Cartesian point of view we obtain a basically naturalistic idea of consciousness, a complementary explanation as it appears in modern science. Husserl pointed out that the only way out of this misunderstanding is to notice and make completely clear that this Cartesian „physical objectivism" has a counterpart in the form of „transcendental subjectivism" (Friedman, 2010, 103). This is how Husserl connects Descartes with Kant's transcendental idealism. Although

[35] In contrast, the descriptive psychology of his contemporaries, including Brentano and Dilthey, mostly applied the naturalistic, Galilean-Cartesian method, therefore: „There can no longer be a descriptive psychology which is the analogue of a descriptive natural science." (Husserl, 1970, 223) As it has been showed, Husserl strongly criticized empirical psychology particularly because of its misguided, naturalistic approach to consciousness (Feest, 2012, 499). This unreasonable approach rooted in the attempt to phenomenologically characterize the intentional objects of consciousness that would inevitably lead to the realization of Brentano's and Dilthey's inadequate methodology (i.e. the conception of inner versus outer perception would not suffice as a fundament for psychological research). The remedy, for Husserl, could lie in the heart of his phenomenological method: it reports not only about the *contents* of consciousness, but provides a vast understanding about the features of intentional mental states. Eventually, argued Husserl, this method could result in the attainment of *synthetic a priori principles* that are essential in the constiution of human conscious states, and even lead to the collection of empirical data concerning intentional mental states.

transcendental subjectivism also has its origins in Descartes' philosophy, it culminated in the „truly" transcendental philosophy of Kant where consciousness is not considered as a „complementary part" of Nature, rather as a transcendental-constitutive fundament of all existence (including the physical world; see *chapters 2.1 and 2.3*). Husserl criticized Kant's transcendental philosophy as it was built on Leibniz's system and misinterpreted its intuitive/perceptual characteristics. Consequently, this lead to an essentially misguided transcendental inquiry where the investigation starts with geometrical „facts" about the physical world and then create „mythical constructions" (Kant's transcendental psychology) to make an explanatory frame to support this fact. „Kant's unexpressed 'presupposition'", argues Husserl, is specifically „the surrounding world of life, taken for granted as valid" (Husserl, 1970, §28). Only transcendental phenomenology – through its systematic *bracketing* – could penetrate into this „pre-given life-world" to express a fully coherent and scientific transcendental philosophy (Friedman, 2010). The life-world, as discussed above, is, in fact, the world as it *appears to us* in our experience, through our own subjective perspective. The world as it is *experienced/lived by us*, populated by physical objects, bodies, etc. We ourselves are embodied and are in interaction with other physical beings in our spatiotemporal environment. It also includes various intentional activities which could be as complex as arts, sciences, and so on. Importantly, this life-world also contains other human beings who may interact with me or with whom I may interact in order to get engaged in several – collective – activities, so it is an essentially intersubjective realm with all the collective cultural and historical aspects of human existence and history. Thus:

> „… experience in the pre-scientific sense… plays an important role within the technique proper to natural science." (Husserl, 1965)

He also emphasizes in the *Crisis* that:

> "… the natural sciences have not in a single instance unraveled for us actual reality, the reality in which we live, move, and are." (Husserl, 1970, §36)

We find many other allusions in his main work to the fact that the *world of actual experience* is always *intersubjective* (Husserl, 1970, §48). To say that we are historical beings does not only mean that we appear in history and then disappear within a certain

frame of objective temporality. The historical angle is an inherent feature of our self-consciousness and consciousness in general. So, as Husserl puts it, historicity is an important characteristic of *transcendental* – „world-constituting" or „world-engendering" – consciousness. Human subjectivity both means a way of existence as a subject *for* the world (transcendental subjectivity), and a form of existence as an object *in* the world. Thus, for Husserl, the world itself is constituted by a historically situated and embodied transcendental subjectivity (Carr, 2010, 94). Sartre and Merleau-Ponty both appreciated his position on embodiment: Husserl's intentionality is always spatiotemporally instantiated (i.e. in a given medium or setting, location, situation, etc.) including both the body and the mind. When, for instance, I am reaching out to grab my coffee mug, I only focus on the subjective givenness of the mug (and all the life-world objects surrounding it). This subjective givenness of my coffee mug – within my experiential life-world – is constituted by many components: visual experiences (the sight of the mug) are correlated with several kinaesthetic experiences (touching the mug, feeling its weight, feeling my body *as it is moving* towards it). Life-world objects are, therefore, always intentionally correlated in my experience, and the body (broadly speaking „embodied cognition") has a *phenomenological interface*[36] role here.

Importantly, for Husserl, addressing the „body" primarily means the *lived body* (*Leib*), and not the *biological-physiological body* (*Körper*) as a material object. Concerning the old problem of Cartesian mind-body dualism, he purports that what is actually standing against the material body is not the soul, but a *concrete unity of soul and body*, i.e. the *human subject* (Carman, 1999; Husserl, 1999). But his reference to the unity of soul and body does not exonerate his system from being essentially dualistic.[37] Husserl's notions of the psychophysical unity of human beings are frequently re-conceptualized in his later works where „the concept of a person is logically prior to that of an individual consciousness", therefore his „distinction between the lived body and material bodies is not enough (…) to overcome the conceptual dualism underwriting his project" (Carman, 1999, 210). In summary, for Husserl, the intentionality of the body is a sort of transitional phenomenon located somewhere between the objectiveness of reality and the subjective experience of the

[36] That is, I cannot separate my self from my body as both have an *immanent transcendental function* in the constitution of my life-world.

[37] Descartes argues likewise: „I am not merely present in my body as a sailor is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit." (Descartes, 1984, 81; 1985a)

self. The body is not an object itself, rather a „quasi-thing" owned and operated by a disembodied transcendental ego that uses it as the very placement of its subjective sensations.

2.5.2 Merleau-Ponty's novel phenomenology of the body and mind

Since the middle of the twentieth century Maurice Merleau-Ponty's phenomenology has been an absolutely critical component of contemporary inquiries concerning human consciousness. Besides philosophers, many neuroscientists and experts in cognitive psychology read and cite his works, as well. Thus he can be considered as one of the most important initiator of the interdisciplinary dialogue between phenomenology and cognitive sciences that lead to the establishment of the theory of embodied consciousness and its practical-therapeutic implications (in „naturalizing phenomenology"). His philosophy is mainly built on the grounds of Husserl's and Brentano's works, but Gestalt psychology and neurology was also crucial for him. In his phenomenology, perception has a central role in engaging with the world and apprehending its aspects. Merleau-Ponty strongly emphasized the *role of the body* in *knowing the world* and he thereby reformed the old tradition that regarded consciousness as the only source of knowledge. He upheld the idea that the body and that which it observed are essentially the same, an idea that stands very close to Schopenhauer's philosophy (Carbone, 2004). Including embodiment – as the dominant element – in his philosophy caused him to deviate from the path of his teachers and predecessors, such as Husserl's phenomenology. He replaced „traditional phenomenology" with what he called the „indirect ontology" of „the flesh of the world" (Merleau-Ponty, 1968).

It is also important to mention that, historically, the classic Merleau-Pontian view of the subject and agency ('I do not *own* my body, I *am* my body.') was preceded by Gabriel Marcel's early concept of bodily existence. According to Marcel, all of *my* existential judgments are based on and "coloured by" the bond between *me* and *my body*. He explicitly says that we are not able to separate "1) existence, 2) consciousness of self as existing, and 3) consciousness of self as bound to a body, as incarnate" (Marcel, 1965, 10). This relationship includes a peculiar way of objectivity: my body always takes absolute precedence over other objects in my perception as it is given to

me in a non-exclusively objective way (i.e. with a certain sensation of *"myself-ness"*). In Marcel, my body appears as an "absolute mediator" between my self and my worldly actions, an important idea later shared both by Sartre and Merleau-Ponty.[38] Likewise, Sartre had already introduced the term "the flesh" that became also fundamental in Merleau-Ponty's philosophy (please see above!). Sartre handled the body in three ways in his famous *Being and Nothingness* (Sartre, 1956, 303-360). Firstly, he contended the body manifests itself in two disparate epistemological ways: it is *given to me* in one way, and *given externally to others* in a different way (similarly as we have seen in Marcel's philosophy). From this perspective, the body appears as a transcendent non-thing, the very medium of my experience of the world. Secondly, for Sartre, the body also appears as the very tool of actions and activities in engagement with the world. Thus, we can realize that others' bodies are also represented as possible *tools* for our worldly perceptions and actions, so – in a similar vein – I can also grasp *my own body as a tool*. Thirdly, my body has a definite intersubjective dimension as I always experience my body as *it is experienced by others*. This relational perception is clearly rooted in the social sphere of human existence, even when the others are not present. As Sartre wrote: „With the appearance of the Other's look I experience the revelation of my being-as-object; that is, of my transcendence as transcended." (Sartre, 1956, 351)[39] In the light of the foregoing, especially when referring to Husserl, the lived body consequently saturates consciousness ceaselessly. The body vastly influences the psyche, is eternally present (even in dreams and daydreaming), and is always constituted psychically within the full range of our experience including a plethora of physical sensations and social interactions. Or in the words of Sartre: "I exist my body." (Sartre, 1956, 351) Sartre's philosophical notions of the body – though not without immense criticism and debate – were absolutely crucial for Merleau-Ponty in refining his phenomenology and theory of embodiment (Langer, 2010).

The phenomenological framework of Merleau-Ponty's system presupposes that consciousness is *necessarily embodied*. Thus, in contrast to Descartes', Leibniz's, Kant's or Husserl's approach, he is not focusing on immaterial substances, abstract and intangible egos, mental contents, etc. Instead, in the very center of Merleau-Ponty's

[38] Accordingly, my self and my actions cannot be reduced to my body rather they all (i.e. self, actions, body) form an *existential-owning-operative* conglomerate (Marcel, 1965, 154-158.).
[39] "I experience how the other sees me, even in the physical absence of the other…" (Moran, 2011, 14)

inquiry stands the body acting in and orienting itself in its surrounding environment (world) in an expressive manner. As he writes in the *Phenomenology of Perception*:

> „Truth does not 'inhabit' only the 'inner man', or more accurately, there is no inner man, man is in the world, and only in the world does he know himself. When I return to myself from an excursion into the realm of dogmatic common sense or of science, I find, not a source of intrinsic truth, but a subject destined to the world" (Merleau-Ponty, 2010, in *preface: xii*)

The transcendental self, says Merleau-Ponty, was regularly and falsely identified with inner agents in modern philosophy; however, it is actually connected and related to the outer (objective), intersubjective world by an intricate web of intentionality. Merleau-Ponty, in the footsteps of Husserl, argues that the thinking ego should not be viewed as a „homunculus"[40] but must be interpreted as an essential, structural characteristic of experience (Merleau-Ponty, 2010, 408-411). Moreover, his philosophical analysis of intentionality shows that the directedness of intentionality flows from the perceptual experiences to the various actions of the *lived body*[41] (i.e. movement, affect, etc.). These preconceptual modalities of mental states inherently possess a form of directedness (as opposed to the intentionality of, e.g. decisions or judgements). These conscious states always involve the lived body of the perceiver (Heinämaa, 2014; Merleau-Ponty, 2010, 77-83).[42]

In Merleau-Ponty's phenomenology, embodiment (or „corporeality") has nothing to do with the functional processes as described by neurophysiologists or medical researchers (Merleau-Ponty, 2010, 105-107). The body not only plays a role in the emergence of perceptual objects in our field of consciousness but – to some extent – also manifests itself in it (Clark, 1998, 171-172). This „some extent" means a

[40] As it was originally suggested by Descartes.

[41] The perceiving-moving body with all its sense organs, which are incessantly linked to perceptions directed at objects/occurences of the environment.

[42] A very important aspect of Merleau-Ponty's phenomenology – in terms of intentionality – is that perceptions cannot be considered as representations of the perceived object; this is in good agreement with Husserl's approach (Merleau-Ponty, 2010, 137-141). The perceived object appears in our perception in its totality, in its „fullness"; therefore, other entities (e.g. different neural/mental states or their elements, such as images, signs, etc.) are not re-presenting it in any way: *„… the possession of a representation or the exercise of judgment is not co-extensive with the life of consciousness. Rather consciousness is a network of significative intentions which are sometimes very clear to themselves and sometimes, on the contrary, lived [vévues] rather than known."* (Merleau-Ponty, 2006, 173)

significant contribution to the overall process of phenomenological experience. For instance, while driving, I try to avoid an impact with a tree in a turn of the road. The thematic object in this case is the tree coming towards me quickly, but this experience has also many other negligible elements (mostly marginal objects, such as the color of the flowers around the tree, a rabbit in the distance, clouds on the horizon, etc.). Additionally to the thematic and marginal objects, I am also experiencing my own living body: it appears not as the center of my thematic attention but as an essential point of orientation and something through which I embrace the world. My body remains with me permanently, *inserts* me in the world cognition-wise, never disappears from my perceptual field rather provides me with an unique perspective:

> „It is neither tangible nor visible in so far as it is that which sees and touches. The body therefore is not one more among external objects, with the peculiarity of always being there. If it is permanent, the permanence is absolute and is the ground for the relative permanence of disappearing objects, real objects." (Merleau-Ponty, 2010, 105-106)

Merleau-Ponty also seeks for the means of reflexive relation that is possessed by body-subjects: when I touch my own body (e.g. I touch my nose with my index finger), I am experiencing a double-sensation, that is I co-experience the kinaesthetic act of touching and the tactile sensation of the finger on my nose. This experience can be subdivided into four major, interdependent components: 1) the sensation of moving my own body (kinaesthetic component – pertaining to my index finger), and 2) the sensation of touching a soft and warm surface (pertaining to index finger, as well); furthermore, 3) the kinaesthetic sensation of my resting nose 4) being touched by my moving finger (i.e. both 3 and 4 sensational modalities are belonging to my nose). Merleau-Ponty uses this model for the conceptualization of other perceptual (body-thing and body-body) relations. Utilizing this sort of reflexive relational model, he claims that the body is „Nature's way studying itself" (Merleau-Ponty, 1968).

Merleau-Ponty proposes – in accordance with Husserl – that each perceptual experience includes a marginally given, mediating living body, operating sense organs, and a „general gestalt of bodily operating" (Heinämaa, 2014; Merleau-Ponty, 2010, 323-325). My body, therefore, is the very entity through which I experience things and is able to act on them. Albeit this resonates with the fact that I am capable of

objectifying my body,[43] from a phenomenological standpoint, *objectification* is not a free act but it is deriving from the experiential context where external things are provided by our own body-in-action. So objectification is quite far from being an independent act, rather it is based on a principal and underlying stance according to which our body is given to us in a way as we are actually possessing things (Merleau-Ponty, 2010, 370-371). Thus the body, as a *capability* or *potential of having things*, is not limited to a certain entity or a group of entities but it „allows us to relate to all things, actual or possible, real or imaginable" (Heinämaa, *ibid.*). Or in the words of Merleau-Ponty: „my body is my general power of inhabiting all the environments which the world contains, the key to all those transpositions and equivalences which keep it constant" (Merleau-Ponty, 2010, 363). We can, with ease, visualize fantastic sceneries of extraterrestrial landscapes, we can even imagine ourselves as being a bird or another animal with completely different anatomy and physiology, but all of these imaginations are rooted in the experiential relation that is originally created and emerging between the things and our living body. This fundamental aspect of our bodily relation is essential in Merleau-Ponty's phenomenology.

However, the body is not a mere vehicle or tool for interacting with physical objects and operating in the world that surrounds us, we also use it to communicate with other conscious beings and, in doing so, we perform many specific communicative acts (body language, gestures, etc.) that allow us to connect with them. Here, Merleau-Ponty introduces the concept of *intercorporeality*,[44] which refers to the inter-corporeal process occuring amongst human beings as bodily subjects.[45] Intercorporeality is important in a sense that it widens the horizon of intending; it is a prompt and expressive relation emerging between living bodies (whether is a human or an animal) irrespectively of their cultural background or social rule systems. Merleau-Ponty demonstrates the relevance of this phenomenon with an example of infant-adult communication, where the baby is capable of „decoding" the body language (bodily intentions) of an adult by screening his facial expressions:

---

[43] That is to examine and treat it as a *thing*.

[44] According to some experts – such as Dermot Moran – the original concept of *„intercorporéité"* should be attributed to Sartre since he had already elaborated the core concept in his *Being and Nothingness* by the time *Phenomenology of Perception* was first published (Moran, 2011, 9-10).

[45] Merleau-Ponty uses Husserl's conception of embodiment and intersubjectivity when addressing the question (Merleau-Ponty, 2010, 407-411).

> „A baby of fifteen months opens its mouth if I playfully take one of its fingers between my teeth and pretend to bite. And yet it has scarcely looked at its face in the glass, and its teeth are not in any case like mine. The fact is that its own mouth and teeth, as it feels them from the inside, are immediately, for it, an apparatus to bite with, and my jaw, as the baby sees it from the outside, is immediately for it, capable of the same intentions. 'Biting' has immediately, for it, an intersubjective significance. It perceives its intentions in its body, and my body with its own, and thereby my intentions in its own body." (Merleau-Ponty, 2010, 410)

Intercorporeality is thus the explicit and immediate recognition of the similarity of my own body to a particular, given body (or to other bodies in general). It involves sensual-corporeal (i.e. tactile, visual, kinaesthetic) modalities as well as the intentional features of movement and postures. This latter is a crucial aspect in the establishment of „bodily connections" so it can be considered as a *direct connection* as much as it *does not involve* any thought-processes (introjection, projection, etc.):

> „It is imperative to recognize that we have here neither comparison, nor analogy, nor projection or 'introjection'. The reason why I have evidence of the other man's being-there when I shake his hand is that his hand is substituted for my left hand, and my body annexes the body of another person in that 'sort of reflection' it is paradoxically the seat of. My two hands 'coexist' or are 'compresent' because they are one single body's hands. The other person appears through an extension of that compresence; he and I are like organs of one single intercorporeality." (Merleau-Ponty, 1964, 168)

This bodily „correlation" (or resemblance) is directly and instantly perceived because both of the interacting bodies are differentiated internally and experientially. The act of movement in case of both bodies in this specific relation are „lived", experienced internally (kinaesthetic modality) *and* externally (e.g. tactile feedback), as well. Such as in the example given above, when I move my index finger to touch my nose I simultaneously perceive the movement of my arm and feel the touch on my skin. Thus the living body is a dynamically entwined, bifold-complex system of the experiential „inside" and „outside" (Clark, 1998). Both Husserl and Merleau-Ponty contend that, in such a way, intersubjectivity and intercorporeality are rooted in the „experiential

framework" of the body in a *constitutive manner* (Husserl, 1970, 106-108, 220-221; 1999a, 127; Merleau-Ponty, 1968, 80-82, 192; 2010, 409). However, as Heinämaa points out, this does not mean that interiority and exteriority are mixed and „… merge to form one unified super-body, as is sometimes suggested. What it means is an immediate corporeal correspondence between individual bodily subjects or 'minded bodies', grounded on the kinaesthetic, proprioceptic and sensory capacities of the bodies in question. On the basis of this basic correspondence, human and animal bodies can spontaneously operate in concert, i.e. in coherence and harmony" (Heinämaa, 2014, 78; see also Heinämaa, 2011).

We have already seen that intercorporeality, as the movement-based association of two or more bodies, plays a significant role in Merleau-Ponty's philosophy of the body. Another very important component of his theory of embodiment is the „body schema", the resultant of kinaesthetic features of the living body (Merleau-Ponty, 2010, 239). It includes all the spatiotemporal-motional possibilities of an individual body, and intercorporeality itself is also regarded as the *correlation of body schemas* in Merleau-Ponty's philosophy (Merleau-Ponty, 1964, 52-55, 65-68). The body schema, however, is significantly differing from the *body image* as far as its experiential features are concerned. For Merleau-Ponty, the difference lies in the *extent of exactness*, inasmuch as the body image only has the visual dimension of the experiental body while the body schema includes the sum of all its sensual aspects (kinaesthetic, visual, tactile). They have overlapping functions in the performative control of lived body actions and both are considered „preconceptual" in the sense of classic Husserlian phenomenology.[46]

As it has been discussed above, mind-body relations were radically redefined in Merleau-Ponty's phenomenology. Through his investigations concerning embodiment and intercorporeality he demonstrated that human consciousness is not a mere product of physiology or the resultant of an abstract intellectual power. Human *perception* is always *embodied* and its corporeality is always *intentional*, furthermore its intentional character is strongly grounded in the living body's senses. Thus his phenomenology completely dissolves Husserl's original transcendental subjectivity in the interwoven, causative dance of mind, body, and the world. In Husserl, the body is not considered as constitutive of intentionality rather appears as a noetic performance of transcendental subjectivity. It is worth mentioning that Gallagher (1986) shows the immense reference

[46] Both Husserl's phenomenology and the Kantian schematicism had a major impact on Merleau-Ponty's concept of the body schema (Husserl, 1973; see also Heinämaa, 2014).

in Husserl's writings of somaesthetic experiences (pain, warm, hunger, cramp etc), and these are considered as inner hyletic (sensual) data that constantly bursting forth from the periphery of consciousness. In this respect, hyletic experiences are at the near side of consciousness and tightly connected to the body (as much as they are *Leib*-experiences) (Gallagher, 1986, 141-142). Although it is true that the body is bracketed in the *epoché,* however, Husserl also was ready to admit that consciousness is not absolutely pure noetic consciousness because bodily experiences (e.g. pain) can gradually distract the phenomenological awareness. To put it bluntly, the lived body (*Leib*) can suffer or feel pleasure under the yoke of the strict glance of noetic consciousness. Furthermore, Husserl, in one of his late manuscripts, proposed that we are unable to doubt the apodictic evidence of the reality of the bodily-personal subject. He placed the sensual body into the center of our phenomenal field stating that we exist in the world as embodied selves (Husserl, 2008, 252-255). In spite of these peculiarities the concept of *motoric intentionality* and *intercorporeality* are definitively Merleau-Ponty's groundbreaking ideas. In Merleau-Ponty's phenomenology, the body is a primordial component of perceptual awareness and establishes a perpetual source of overall intentionality. So the intentional constitution of the living body is not a result of cognitive processes linked to any „ego" or „I", but the body itself is the „I" in its fundamental, primitive, primeval perceptual capacity (Carman, 1999, 224). As Merleau-Ponty has it, we do not *own* bodies rather we *are* bodies in its uttermost existential meaning. So we must recognize that „we are in the world through our body, and in so far as we perceive the world with our body. But by thus remaking contact with the body and with the world, we shall also rediscover ourself, since, perceiving as we do with our body, the body is a natural self and, as it were, the subject of perception" (Merleau-Ponty, 2010, 239).

Unlike many of the most influential figures of modern philosophy, Merleau-Ponty does not miss to take into account the body-centered perceptions and motions: Descartes, Leibniz, and Kant ignored the intricate organizing process of consciousness, rather they saw it as it passively receives impulses from the „sensory manifold" and, *in a separate step*, organizes them due to the inherent laws of Understanding (as in Kant's philosophy). These philosophers contend that our experience of space is a result of a directly given – or *a priori* – form of Sensibility (Kant), but Merleau-Ponty showed that we actually acquire our perception of the third dimension from our own motor activities through the lived body (Goodrich, 2010, 337). However, probably his most important

contribution to the field of consciousness research was the elucidation of the experiential domain of philosophical inquiry, which had previously given rise to the two predominant paradigms – the *metaphysical-incorporeal mind* and *material-mechanical body* – of mind-body concepts. Merleau-Ponty's novel phenomenology wholly reconsidered these two idealistic and highly abstract models that had dominated the field of modern philosophy since Descartes and Kant. His approach to consciousness is thereby not only criticizes and loosen the ideological ossification long been present in Western philosophy, but also addresses important psychological and cognitive neuroscientific issues within the context of the philosophical discourse. As I will attempt to show in the next chapter, his ideas were extremely important in the elaboration of modern phenomenological terms and concepts especially as they applied to cognitive psychology and certain forms of psychotherapy.

2.6 Phenomenology, embodiment and contemporary science: reflections and refutations

The term "embodiment" exemplifies a new interdisciplinary dialogue between philosophy and neuroscience (Varela et al, 1991). At the same time, contemporary discourses on embodiment have grounded a common mindset among psychologists and psychiatrists. Moreover, embodiment encompasses and integrates the newest developments in cognitive neuroscience and robotics (Shapiro 2011). Besides the scientific-technical orientation of embodied cognition, embodiment also has philosophical roots as it harnesses the key features and concepts of Husserl's and Merleau-Ponty's groundbreaking ideas in phenomenology. The works of Shaun Gallagher (Gallagher 2011; Gallagher and Zahavi, 2012) and Thomas Fuchs (Fuchs and Schlimme 2009) demonstrate that embodiment can be seen as a new paradigm in order to reinterpret psychopathological mind states (for example neurological neglect syndromes, schizophrenia, or depression) and – as it will be showed in *Part Three* – even psychosomatic diseases. The subjectively lived body, the lived space, and lived time are all key dimensions of these approaches. It is fairly reasonable to say that the relation between body and mind, or more precisely the psychosomatic dynamics of the mind-body complex is one of the key issues in the discussions about embodiment and in the interpretation of different mind states. In the last two section of this chapter we will

focus on the contemporary scientific and philosophical atmosphere of phenomenology and embodiment and their relation to the question of psychosomatics.

2.6.1 Neurophenomenology and embodiment

Early cognitive sciences considered the human mind as a kind of symbol-manipulating system. Novel brain imaging methods (MRI, PET, CT, etc.) allowed scientists and philosophers to enter new, breathtaking areas of investigation. Perhaps not surprisingly, this new wave of cognitive neuroscience had been followed by a reductionist trend in which the *subjective-personal* (our „experiential world") was reduced to brain processes. As the Nobel laureate Francis Crick puts it in his famous book *The Astonishing Hypothesis*, our self, our identity is „nothing but a pack of neurons" (Crick, 1995). However, the scientific rediscovery of the problem of consciousness cannot be construed in such a simplistic way. The problem itself includes numerous elements, such as the research of perception, memory and other information-processing brain algorithms, evolutionary and social psychology, artificial intelligence, animal consciousness, and many more. The initial reductionist euphoria has always been standing in the crossfire of philosophical debates. For instance, Thomas Nagel's groundbreaking paper was one of the first pioneering works that emphasized the importance of the irreducible aspects of phenomenal consciousness, the *subjective perspective* and *qualia*[47] (Nagel, 1974). Joe Levine, in turn, reconceptualized the old mind-body problem by introducing the term „explanatory gap" (Levine, 1983). David Chalmers, soon after, proposed the „hard problem of consciousness"; he drew attention to the impotency of science in answering the question of the *genesis of subjective experience* in the brain (Chalmers, 1995). The most radical philosophical critique of the study of consciousness was drawn up by Bennett and Hacker (2006) who argued that cognitive neurosciences created and cultivated a pathetic „neuromythology", since the *de facto correlation* of *subjective experiences* and certain *brain states* are quite questionable and „highly problematic". If neuroscience seeks for these correlations in a top-down manner, then philosophy and psychology must be involved in the discourse,

[47] The term „qualia" – emerged in the twentieth century and has been mostly used by british and american philosophers of mind – denotes the *subjective aspect* of *sensation* or *consciousness* (broadly speaking: the way things *are experienced by us*).

as well. Naturally, the application of a psychological and/or philosophical typology in neuroscience should not be considered a methodological error per se, because investigators are forced to map subjective experiences anyway. There is, in fact, no other way to perform correlation analyses (Horvath, 2011). Nevertheless, Bennett and Hacker contend that the interpretation of brain processes involves *mereological fallacy*, a very serious category mistake. Following Ludwig Wittgenstein, they argue that it is fundamentally erroneous to attribute any mental states to a *certain part* of the brain (or the mind). These kinds of *causal explanations* are burdened with the philosophical ballast of Cartesian substance dualism and the modern „brain in a vat" type of „fairy tales" (Bennett and Hacker, 2006; Bennet et al, 2007).

It is very important to note that modern *neurophenomenology* – with its roots in the Continental philosophical tradition – similarly criticizes the reductionist approaches. The programme of neurophenomenology utilizes the most recent achievements of cognitive neuroscience and embodiment theories, also including classic phenomenology. It approaches to the mind-body problem in a radically new way. As it was discussed in *chapter 2.5*, embodiment has the philosophical capability to dissolve the ontological dualism of the Cartesian mind-body model, and focus on the mutual relation of different levels of description/explanation. According to Evan Thompson, sociocultural activity cannot simply be *implanted* into the heads or minds of human beings. Cognition is always the result of the interaction occurring between an individual and her environment. Similarly to Merleau-Ponty's ideas, Thompson argues that cognition is always *embodied* (as it presupposes sensorimotor activities and perceptions), but – at the same time – it is also integrated in the sociocultural milieu or, in other words, the life-world of the person (Thompson, 2007). This „ecological" approach considers living beings as *autopoietic*, autonomic systems that actively regulate and sustain their integrity. Furthermore, they define, control and adjust their boundary conditions, and thereby – via these mechanisms – they *enact* their cognitive horizons. In this novel perspective, the central nervous system appears not only as a mere input-output „switch" rather as a system capable of meaning-constitution. In this very case „meaning-constitution" means the process (or phenomenon) through which every organism reacts to its environment by constantly modulating its neural activities, and create dynamic representations of it. These representations are then actively influence their behavior. So perceptual experience is always *imbued with meaning* and cannot be reduced to the brain (as a causal factor). Intentionality is characteristic of the

behavioral patterns of such primitive life forms as bacteria. *Sensation* and *feeling* can be attributed to the reciprocal interdependence of sensory-motor-cognitive processes; in phenomenological terms we could say that the organisms „individual skills" allow the emergence of certain and various experiences (or experiential features in its subjective cognition (Thompson, 2007, 256). Therefore, *there is no ontological gap between mind and body* rather the *dynamic relationship of the body and its environment* forms that specific *somatic-affective attitude* that could be the *very fundament of different psychic phenomena.* Modern neurophenomenological research seems to have the potential to expand and further elaborate the connections between personal and neural levels of description (Horvath, 2011, 1308). This is why contemporary researchers state that a promising, mutually elucidating, reciprocal relationship might be established between phenomenology and life sciences (primarily – but not restricted to – neurophysiology. Thus neurophenomenology can be considered as an undertaking to reinterpret the dilemma of mind-body dualism by applying the achievements of dynamic systems theory and classic phenomenology (Gallagher and Zahavi, 2012; Horvath, 2011; Thompson, 2007).

Initially, neurophenomenologists regarded Husserl's philosophy solipsistic and looked upon his phenomenological programme as a terrible conceptual failure (Thompson, 2007, 413). However, Varela and Thompson – having read and extensively dissect Husserl's works – found out that Husserlian monadic transcendental egos are *indeed interacting with one another*.[48] This remark can be complemented with the previously discussed characteristics of Husserl's and Merleau-Ponty's phenomenology: perception always presupposes a preliminary „phenomenal field", that is to say perception is a kind of *primordial relation* on which other formations (cultural, moral, aesthetical, etc.) are built. The pre-conceptual, pre-scientific perceptual relation is essentially dynamic, laden with ambiguity, and the *meaning* itself is *already immanently constituted*, encoded in „aspect seeing". What we actually perceive are the *meaning-imbued phenomena* but not the elementary/primary sense data or qualia. These phenomena, however, are not simple Gestalt-patterns emerging and resulting from the interaction of our mind and our perceptual surroundings. In phenomenology, object-awareness is always multi-faceted and multi-componential. For instance, when I am

[48] This interactive and world-constituting momentum is illustrated with the concepts of *transcendental intersubjectivity* and *life-world* in Husserl (for additional details, please see *chapter 2.6* and its sub-chapters).

looking at a coffee mug it is phenomenologically *given to me* from a certain aspect in my perceptual field; yet, when I slightly move, I suddenly recognize another aspect of the mug as it *reveals itself to me* in the three-dimensional space. In Husserl, object-awareness is always „perceptually ecological" (i.e. always includes the mentioned multi-componential feature): the object that is in the focus of my „signitive act" is articulated in the intersection of other – potentially existing – perspectives (Husserl, 1999a). Perceptual experience is always embedded in the sociocultural context, therefore we denote phenomena as a result of a learning process. As it was shown above, Merleau-Ponty, in the footsteps of Husserl, further radicalizes the principle of phenomenological reduction. Embodiment utterly gives up the tradition of the objectifying, experientially idealistic way of thinking, and traces back phenomenology to bodily (spatial), *intermodal perceptions* (Horvath, 2011; Ullmann, 2010, 384-385).

However, neurophenomenology cannot – should not – be seen as another philosophical turn rather it is a sort of „hybrid discourse" on the borderline of several fields including phenomenology, computational and life sciences. Neurophenomenology holds that the explanatory gap does not separate different ontologies. What we actuallly see is not a radical ontological chasm between the mental and the physical; incommensurability only emerges between the typologies of the *subjectively lived* (Leib) and *biological bodies* (Körper) (Thompson, 2007, 237). This philosophical trend also has to admit the explanatory gap in absolute terms. Importantly, neurophenomenology – in spite of the irreducibility of the *transcendental ego* and the *life-world* – does not exclude the possibility of a productive relationship between naturalism and phenomenology. It attempts to avoid reductive approaches, and does not claim that the immense, colorful spectrum of different conscious states are exclusively originating from the neurophysiological characteristics of the brain. This kind of category mistake is considered completely nonsense both in philosophy and biology (Thompson, 2007, 241). On the one hand, the human brain is reciprocally wired so it should be – but not exclusively! – seen rather as a dynamic singularity than as a kind of rigid, pre-wired structure. On the other hand, our bodily experiences (somatosensory representations) are defined not merely by brain states but various endocrine, cardiovascular, immune, and other specific physiological states are also highly involved in the constitution of *the „affective background"* that could be considered as a *pre-reflective factor* in our experiences. Most of the contemporary philosophical dilemmas are emerging from the so-called „matching-content doctrine". Reductionist researchers

found very compelling isomorphisms between certain patterns of neural activities and the perception of simple geometrical shapes. For example, if I look at a pentagon on a screen in front of me, a very similar geometrical shape may appear in my V_1 visual cortex (associated with many other neurophysiological factors, of course). However, this topographical mapping is very limited in many ways and, according to Thompson, we must renounce this sort of matching-content approach. Albeit isomorphisms might be useful in case of very simple visual patterns in cognitive sciences, some researchers try to expand their importance to higher-level conscious events, as well. For example, Antonio Damasio defines a certain class of "dispositional representations" that emerge on higher levels of informational processing and fundamentally determine the boundary conditions of sensation and feeling (Damasio, 2005). Nevertheless, as Thompson has it, we must realize that we *are unable to reduce the wholeness of the phenomenal field to brain activity* (Thompson, 2007, 241). He contends that, at least on an abstract level, dynamic systems theory could be the common axis that could complementarily model brain processes and the eidetic features of phenomenal experiences (Thompson, 2007, 354).[49] In line with this, Bickle and Ellis (2005) points out explicitly that the neurophenomenological concept of consciousness could boost and extend the discourse on transdisciplinary psycho-neuro-research. Varela (2004) and Thompson (2007), in a certain sense, accept the non-eliminable nature of the explanatory gap, and the irreducibility the lived body and transcendental ego. Following the path of classic phenomenology, they do not consider consciousness as an *attribute-to-be-reduced* rather as an *emergent feature of the bodily-intersubjective mode of existence*, a zero-point of orientation that gives rise to the unfolding of the experiential aspect of existence (Varela, 1996). Very recently, another field emerged in life sciences that may give an important piece to the big picture of interdisciplinary consciousness research. In the next chapter we will briefly explore this new discipline and its implications in phenomenology and psychosomatic medicine.

[49] He also emphasizes that we can no longer find the phenomenological analogy of life-world below the level of self-organizing autopoietic systems (Thompson, 2007, 159).

2.6.2 Psychoneuroimmunology: new vistas or old mistakes?

The old concept that the three major systems of the body – the immune, the endocrine, and the nervous system – communicate with each other was established after a long period of continuous scientific observations, which finally gave rise to the field of psychoneuroimmunology more than three decades ago. In 1980 Robert Ader coined the term '*psychoneuroimmunology'* (PNI) to grasp the idea of convergent findings showing the inter-communicative nature of the brain and the immune system. This new field emerged as an integrative discipline trying to shed light on processes by which mental events modulate immune functions and how, in turn, the immune system is able to alter or interfere with the function of the mind (Daruna, 2012). However, this modern period of psychoimmunological or psychosomatic research was preceded by accidental observations or purposeful investigations carried out through many centuries. The historical antecedents root in as old tradition of the ancient tenets of Chinese, Indian, and Greek natural philosophies (Ader, 1995; Daruna, 2012). In the following, I will try to give a short account to the possible philosophical implications of contemporary PNI research based on recent clinical findings and biomedical hypotheses. First I will pursue to make a concise and hopefully informative explanatory frame to elucidate the basic elements of modern PNI theory, then, I will attempt to show that PNI research may be a useful tool in creating a novel phenomenological explanatory frame for the philosophical analysis of psychosomatic phenomena (primarily focusing on psychosomatic diseases in this chapter).[50]

The foundation stones of modern PNI theory were laid in the middle eighties when Besedovsky and colleagues showed that the serum levels of certain stress hormones (glucocorticoids) are elevated in the course of immune responses to innocuous stimuli. This phenomenon seemed to influence the capacity of the immune system to respond to additional challenges, since the increase in these hormone levels during the response to an *antigen*[51] interfered with the response to a "second unrelated"

[50] In *Part One* we will firstly focus on the possibly useful biological aspects of PNI in phenomenology and embodiment; in *Part Two*, on the other hand, inventions of the jungian and post-jungian analytic psychology will be introduced to the wider context as another feasible element in examining the psychosomatic phenomenon.

[51] Broadly speaking any *stimulus* that may be recognized and subsequently may evoke an immune response. Antigens can be divided into two main groups according to their origin: 1) self-antigens (deriving from the body); 2) non-self antigens (foreign structures, such as bacterial or viral components).

one. This observation also provided evidence for the communication between the immune and neuroendocrine systems by demonstrating that the environment of activated immune cells contained factors capable of stimulating certain parts of the brain (Besedovsky et al, 1981; Besedovsky and del Rey, 2007).[52] The immune-neuroendocrine-brain circuit was proposed as an important regulatory network involved in fine tuning immune responses. These early evidences showed that the immune system is able to elicit neuroendocrine responses, thus it was claimed to be a '*peripheral receptor organ*' or a '*sixth sense*' that transmits information to the brain about endogenous/exogenous stimuli (Besedovsky and del Rey, 2007; Blalock and Smith, 2007). Also at this time, Blalock and Smith discovered a bidirectional communication pathway between the immune and neuroendocrine systems in which immune cells can produce pituitary peptide hormones. Since brain cells can also produce soluble mediators that act on immune cells it became obvious that the common use of ligands and receptors shared by the two systems may occur (Blalock et al, 1985).

A decade later the rapid increase of new findings broadened the spectrum of our knowledge within the field of PNI. A decent amount of experimental and clinical evidence underscored the relevance of the brain-immune feedback mechanism during both infectious and autoimmune disorders (Besedovsky and del Rey, 2006; Sternberg, 2006). As Sternberg argues in a recent review, the central nervous system can be considered as an integral part of the immune system by affecting immune responses (Sternberg, 2006). Contemporary psychoneuroimmunology is distinguished from its ancestors by its novel methodology and theoretical design. Early neuroimmunologists considered the immune and nervous systems as separate parts, but a crucial conceptual leap led to the emergence of the modern approach. This new concept represents neuroimmune communication as an integrated physiological entity with the immune and nervous systems being its two *aspects* (Quan and Banks, 2004).

Significant neuropsychological consequences of the activation of immune system are also well-documented, such as the onset/worsening of bipolar disorder, major depression, anxiety, and schizophrenia symptoms. "*Sickness behavior*" is an important term not only in PNI but also in general psychiatry referring to the effect of

[52] For experts in biomedical sciences: particularly the hypothalamus and the pituitary gland; this led to the activation of the hypothalamic-pituitary-adrenal (HPA) axis.

inflammatory cytokines[53] on mood and behavior. This alteration in psychological state is characterized by lethargy, social isolation, and decreased physical activity (Dantzer et al, 2008; Raison et al, 2006). The common mediators of sickness behavior involve inflammatory cytokines and several factors, which can affect the brain chemistry of mood regulators such as serotonin and other monoamines (Jones and Thomsen, 2013). Several studies point to a causal relationship between inflammatory clinical conditions, certain cytokine-based therapies and depression. Cancer and human immunodeficiency virus (HIV) patients, who receive cytokine therapy, develop cognitive and neuro-vegetative symptoms of depression (Anisman et al, 2007; Pavol et al, 1995). Well-known comorbidities with depression have been documented in cases of rheumatoid arthritis, cardiovascular disease, or myocardial infarction where the patients exhibited elevated levels of inflammatory markers (Halaris, 2009; Johnson and Grippo, 2006). It is also worthwhile to note that antidepressant therapies have been reported to reduce inflammatory markers (Dinan, 2009; Jones and Thomsen, 2013). The symptoms of depression caused by cytokine therapy, is also responsive to treatment with antidepressants but these have only a minor restoring effect on the balance of brain-neuroendocrine function (Hernandez et al, 2008). Recent research also suggests a link between innate immune processes and the etiology of schizophrenia, a psychotic disorder with extremely high prevalence. Recent studies demonstrated that antipsychotic-naïve patients with first-episode acute psychosis exhibit an inflammatory phenotype already at this early stage, and the initiation of treatment can resolve this anomaly, as reviewed by Suvisaari and Mantere (2013). Being at the interface of immunology and biological psychiatry these results underscore the emerging theory of the immune background of schizophrenia. Although many aspects of the underlying mechanisms have not been elucidated yet, several cells and factors have already been identified as potential candidates involved in the pathology of the disease.

Reverse modulation of the innate immune response is also possible. Clinical studies showed that depression decreases the activity of innate, as well as adaptive immune processes (Irwin et al, 2011). Further evidences suggest that psychosocial stress

[53] *Cytokines* are soluble compounds produced by immune cells or other cell types in the body. They can be considered as „the language" of the immune system, since these substances play an essential role in the communication of cells. *Inflammatory cytokines* is a subgroup of cytokines, which cause the classic symptoms of inflammation (i.e. vascular dilatation, increase in blood flow, increased permeability of vessels, etc.); they are usually released by immune cells subsequently the detection of e.g. infectious agents (viruses, bacteria, etc.).

can also lead to neuroinflammation via immune cell activation. Thus, the cross-talk of the brain and the immune system in psychiatric and neurological disorders represents a multi-facet feedback circuit that works rather as a single, integrated entity, than two or more synchronized systems (Szabo and Rajnavolgyi, 2013).

The canalization of affective mental states (e.g. stress, depression) into bodily states always occurs within the context of the *bio-psycho-social model*.[54] Nevertheless, the PNI theory can be – should be – considered as a *naturalized psychosomatic explanatory frame*. Albeit we clearly see the psychological elements in this theory (affective factors, coping strategies coupled with certain disease-predispositions, psychosocial components, etc.), in the end, all of the routes of description and explanation collapse into *psychiatric biologism*. This is due to the fundamentally reductionist strategy that appears to be the basic attitude in the circle of researchers, as we have already discussed in this chapter (see *sub-chapter 2.6.1*). Everything is reduced to molecules and biological processes, even the possible social factors are included. For instance, in this mode of examination and explanation, intimate social interactions between two lovers are reduced to mere cognitive-neurological mechanisms where body language is ultimately reduced to neurocognitive associations between the visual and prefrontal cortices. The "chemistry of love" is eventually sacrificed on the biochemical altar of pheromones and olfactory cues… This way, psychoneuroimmunology is but another reductionist-physicalist strategy with no true inventive value in the philosophy of consciousness.[55]

From the phenomenological point of view, however, promising and interesting elements could be lurking here. On the one hand, the immune system as a sixth sense may *indeed work as a sixth sense*. As has been shown above, the recognition of pathogenic microbes (such as viruses or bacteria) is usually leading to the secretion of inflammatory cytokines in the host. These cytokines then – as *direct signals* – are detected by brain cells, and this process is finally resulting in the modification of behavior, social cognition (sickness behavior), and so on. The immune system can

[54] The biopsychosocial model is an approach that emphasizes the mutual importance of biological (physiological), psychological (including emotions, thoughts, behaviors), and social (cultural, socio-environmental, etc.) factors in human functioning within the context of well-being and illness. In contrast to the biomedical model, this approach states that health can be best understood and defined by the *combination* of biological, psychological, and social factors. The model was initially proposed by George L. Engel in the late '70s (Engel, 1977, 1980).

[55] Although it is also true that originally PNI was not created to be a psychobiological rationale which includes consciousness or any individual/social aspects of affect-regulation in its theoretical repertoire…

detect the dangerous parts of our environment (such as infected water, food, even an infected partner) and may protect us by "subconsciously" altering our behavior. Translating it into (Husserlian) phenomenological terms, the initially *preconceptual* and *pre-reflective contents* are becoming objects of higher-level perceptual discriminations. This higher-level *mindedness* is then transforming into explicitly conceptual content through the *body*. As in Merleau-Ponty, the body (immune-brain communication via cytokines) is the medium through which environmental stimuli are becoming thought processes in a noncanonical way. Here proprioceptive and sensorimotor experience plays a secondary role as compared to the superior importance of direct cytokine signaling. Nevertheless, immune signals subsequently cause alterations in brain processes, which results in modifications of the *affective tone* or *gradedness* of the life-world. Interestingly enough, the *brain-immune axis* is the *sense organ itself* that works as an integrated unity (sixth sense) in an elaborate interaction with the environment. *Thus information derived from neuroimmune communication is becoming part of the Leib, and emerging as a constitutive component of the experiential field (literally becoming subjective experience through the various symptoms of e.g. sickness behavior).* For example, after a viral infection has been contracted, the host's immune system recognizes the pathogen and responds with cytokine secretion, a process that is completely subliminal as far as normal perception is concerned. However, this early phase is relatively quickly leading to the above mentioned immune-brain communication in which cytokine signals are transmitted to neurons leading to the modification of behavior. Sickness behavior then not only provokes sensorimotor and nociceptive experiences (weakness, fatigue, pain, etc.) but also interferes with mood and the intentional features of social cognition (depression, avoidance behavior, etc.). As I have already suggested elsewhere, the naturalized phenomenological explanatory frame may provide an excellent way to philosophically analyze psychosomatic processes in a detailed fashion (Szabo, 2015a). Similarly to Merleau-Ponty, Husserl also believed that positive sciences reveal matters that transcendental phenomenology has to take into consideration. Husserl's heightened interest in the transcendental significance of intersubjectivity and embodiment made him to enter the fields of other disciplines, such as psychopathology, sociology, or anthropology and deal with the philosophical relevance of matters like "historicity" or "normality" (Zahavi, 2004b, 341).[56] A sharp

[56] Let us keep it in mind that the classic Kantian transcendental philosophy would not take into

separation between the *empirical* and the *transcendental*, within the context of both Husserl's and Merleau-Ponty's phenomenology, is "both inadequate and partially misleading" if this opposition is considered as a conclusive and definitive argument against the naturalization of phenomenology (Zahavi, 2004b). The increasing importance of empirical science in phenomenological research is also very prominent in Merleau-Ponty's late works. Pathologies of the body and mind – as deviations from normality – give us an ample amount of "raw material" to look into domains of the *anthrópos*, the human phenomenon, which have been hidden before. Merleau-Ponty himself widely used various psycho- and neuropathological examples in explaining and supporting his theses in phenomenology; he also points out to the significance of scientific approach – in combination with phenomenology – to clarify the fundamental characterstics of diseases:

> "It is in these terms that the disorder discernible in the movements in question may be described. But it may be thought that this description (and this criticism has often been made of psychoanalysis) presents to us only the significance or essence of the disease and not its cause. Science, it may be objected, waits upon explanation, which means looking beneath phenomena for the circumstances upon which they depend, in accordance with the tried methods of induction." (Merleau-Ponty, 2010, 129-130)

His methodology promotes a "merged" philosophical stance far beyond the discrimination of the objective scientific explanation and the subjective phenomenological reflection. What is more, Merleau-Ponty envisioned that phenomenology could be changed and modified through the interdisciplinary dialogue with empirical sciences. Importantly, his position neither discards the transcendental nor reduces phenomenology to another positive science.

The examples above involved a *somato-psychic* mechanism through which somatic (bodily) stimuli are translated into neuropsychological events resulting in alterations in certain behavioral patterns. However, as has been shown above, brain-immune communication is essentially bidirectional so it is tempting to speculate that the

---

consideration any „mundane" disciplines as they do not have any transcendental relevance. Husserl had to constantly reconsider the traditional separation of the *empirical* and the *transcendental*.

centuries-long known *psycho-somatic* diseases are consequences of this kind of cross-talk. In this group of diseases – or in this case of mind-body interaction – the psyche/mind is the one in which somatic symptoms are rooted. In *Chapters Two* and *Three*, by mobilizing classic – Merleau-Pontian and Jungian – phenomenological and analytical psychological principles, in parallel with the unusual conditions of altered states of consciousness, I will try to give an outline of a possible novel framework of analysis for the examination of the psychosomatic phenomenon.

3. PART TWO

PHENOMENOLOGY AND ALTERED STATES OF CONSCIOUSNESS: OUTLINES FOR A NEW FRAMEWORK OF ANALYSIS

> *"What I am trying to do when I use symbols is to awaken in your unconscious some reaction. I am very conscious of what I am using because symbols can be very dangerous. When we use normal language we can defend ourselves because our society is a linguistic society, a semantic society. But when you start to speak, not with words, but only with images, the people cannot defend themselves."*
>
> *— Alejandro Jodorowsky*

Recently, the topic of altered states of consciousness (ASC), such as drug or artificially-induced states (e.g. meditative experiences), became a main concern of interdisciplinary inquiry with a wide spectrum of different approaches. Winkelman's (2010) approach uses the perspectives of anthropology, neuroscience, evolutionary psychology, as well as embodied cognition. As we have discussed already, according to the theory of embodied cognition the mind is not a disembodied entity or process, and consciousness is not a "ghost in the machine"; rather, our bodily attunement to the world is the very subsoil of our higher order cognitive functions (i.e. language, perception, and thinking). Among the wide variety of altered states, ayahuasca[57] visions become increasingly popular in psychological and psychiatric circles as this psychoactive brew appears to be an excellent *model* for investigating the manifold aspects of *psychedelic states*. Benny Shanon (2003) combines cognitive psychology with phenomenological descriptions when examining the structural typology of ayahuasca visions. Rick Strassman (2001) has a different strategy. His main aim is to do pharmacological research with controlled experiments, but he also inclines to plunge into metaphysical speculations. Strassman famously coined the term "spirit molecule"

[57] *Ayahuasca* is a plant-based brew that contains powerful, naturally occuring psychedelics. It has been used as a form of traditional medicine by indigenous people of the Amazon basin since centuries or even millennia (Luna, 1984).

to summarize the effects of dimethyltryptamine (DMT), one of the major active ingredients of the ayahuasca brew. Briefly, the term "spirit molecule" symbolizes the intriguing effect of DMT secretion in near-death experiences (NDE) (Strassman, 2001, 220-221). DMT also seems to have a key role in out-of-body experiences (OBE), which is a crucial experience in DMT sessions.[58] Ayahuasca visions are special kinds of altered states as this brew is coming from the traditional shamanic praxis. Therefore, we may find a common ground between shamanic rituals and DMT experiments based on the similarities of episodic experiences. The term "spirit molecule" is a direct consequence of the subjective-phenomenological accounts of DMT states. In several cases, drinkers have the astonishingly lively experience that their soul (or their first personal viewpoint in a more neutral parlance of phenomenology) leaves the body and travels to the so-called otherworld realms.[59] The goal of *Part Two* is to give an explanatory frame for the phenomenological analysis of ASCs. In order to do this, I will attempt to characterize the phenomenology of altered states through the unique example of ayahuasca visions as a feasible model for philosophical investigations in psychedelic research. My aim is to establish a multi-level or multi-layered framework to interpret altered states of consciousness by means of the basic concepts of phenomenology and Jungian psychology. My other aim in this chapter will be to show the plasticity and malleable experiential nature of the Leib in psychedelic states. These will be important components of the synthetic model of psychosomatic dynamics outlined in *Part Three* (including embodiment, phenomenology and ASCs, as well as the Jungian concept of *complexes* as major elements).

However, prior to that, in order to properly situate altered states of consciousness in the greater picture we need to shortly review the contemporary philosophical problems of psychedelic research.

---

[58] One of Strassman's subject described her spontenous OBE experience under the DMT session in the following way: „Something took my hand and yanked me. It seemed to say, 'Let's go!' Then I started fl ying through an intense circus-like environment. I've never been that out-of-body before. First there was an itchy feeling where the drug went in. We went through a maze at an incredibly fast pace. I say 'we' because it seemed like I was accompanied." (Strassmann, 2001, 169)

[59] Strassman made several high-dose DMT sessions with voluntary participants. One of the subjects, Elena, was prone to describe her induced altered state as similar to the Tibetan Bardo-realm, which is understood to be an intermediary state between two opposite stages (e.g. life and death). Participants often describe their – frequently ineffable – experiences by means of mythological concepts from mystical traditions (i.e. Buddhism or Christian mysticism). (Strassman, 2001, 222)

3.1 Altered states of consciousness and the psychological interpretation of psychedelic states

There are at least six different categories of psychoactive drugs in modern medicine. In the following, we will focus on the category of *psychedelics,* a group that can be split further into smaller ones with a characteristic consciousness-altering effect as being their common feature (irrespectively of their natural or artificial origin). The majority of these substances can be further classified into the categories of hallucinogens or psychomimetics (Farthing, 1992, 451; Maurer, 2010). These concepts refer to the "psychosis-mimicking" ability of these substances since, from the end of the 1970s onwards, the term "altered conscious states" has often been associated with psychopathologies meaning that the similarity of these experiences to psychotic breakdown and to the positive symptoms of schizophrenia seemed conspicuously similar. Thus, for the sake of an appropriate phenomenologically-oriented investigation and to clarify the status of psychedelics in contemporary research, we first need to briefly consider the blurred line between psychopathological and altered states.

By comparison of the diverse symptoms of psychiatric anomalies (e.g. schizophrenia, paranoid episodes, etc.) we find parallels between these disrupted experiences and the ones induced by LSD or other psychoactive substances (González-Maeso and Sealfon, 2009). Regrettably, psychological classifications cannot fully exhaust the phenomenological varieties of the experiences in question. This means that – with detailed scrutiny – experts and scholars have to consider the hallucinations of a schizophrenic patient and the relatively manageable visions of an ayahuasca ceremony or LSD-therapy as *utterly different contexts*. According to the theory of model-psychosis, drug induced altered states are pathological modifications of normal, waking perceptual states. However, several phenomenological descriptions and even more anatomical and neuroscientific data suggest that psychoactive substances can push the doors of perception wide open rather than causing pathological distortions in normal perception and mental functioning. The main theoretical difficulty lies in the indeterminacy of psychedelic experiences, that is, there is a chance to experience "what is it like to be a schizophrenic", and also there is a chance to experience the hidden inner workings of the body (*expanded Leib-experience*), or wonder at the world in an incredibly detailed manner due to the opening of hidden perceptual capacities. In their groundbreaking paper, by the phenomenological analysis of the psychotic break versus

Huxley's mescaline trip, Nelson and Sass (2008) points out that the only overlap that occurs between psychedelics-induced altered states and a pathological psychotic break (such as in early-onset schizophrenia) is the *change in experiential content*. Importantly, this shift in perception – and in overall experience – is vastly different between a psychotic episode and a psychedelic trip. While during a psychotic break the everyday experience of external world loses its emotional dynamism and becomes disturbingly "unreal" and dreary, in psychedelic drug-induced states, conversely, there is a heightened emotional "glow" of the person's life-world:

> "Whereas the familiar takes on a strange and alien feeling in the psychotic break, Huxley's description points to the everyday being given a new, revelatory significance – as if there is a more 'real', unmediated experience of the world." (Nelson and Sass, 2008, 351)

Another important difference between the phenomenology of a psychotic break and psychedelic trip – in terms of their existential features – is that although both deprives the world of its *meaningfulness,* the former is always associated with a mystical quality while the other is rather characterized "by a sense of nausea and horror at the arbitrariness of things" (Nelson and Sass, 2008, 352):

> „There is strong overlap between the experiences with regards to 'mere being'. Sass (1992) describes how, with the thrusting into prominence of the brute existence of objects and words, both language and the world shed their normal sense of meaningfulness. What Gibson (1977) called the affordances of objects is lost, replaced by a world of sheer presence: a hammer, e.g., no longer a tool, is perceived as a pure object. In drug intoxication, too, objects may be freed from their usual significance or conceptual niche. Huxley speaks of the 'thing-ness' and 'Is-ness' of his surroundings. In both cases, conceptual frameworks recede in favour of 'mere being'." (Nelson and Sass, ibid.)

In a psychotic break, complex objects of the external world seem to detach into disconnected "fragments", while during a psychedelic trip, the everyday world tends to fuse into *experiential oneness* (I daresay "*Unio Msytica"*, after Jung) thereby enriching the overall experience with an unique spiritual characteristic.

In his paper, Kiraly (2014), by reviewing a decent body of data, admits that several psychoactive compounds have the potential to increase latent psychopathologies in vulnerable individuals. However, he also clearly demonstrates that in appropriate context the aim of the use of psychoactive compounds is not to stimulate the reward centers of the brain, but to increase the adaptive capacities, strengthen the ego and well-being of the subject.[60] Moreover, psychedelics can trigger neurosynchronizing mechanisms and pharmacological dynamics that do not disrupt the organization of cognitive-perceptual data in the brain rather allow the mind to *integrate subliminal information into conscious awareness* (Winkelman, 2002, 1877).

In contemporary consciousness studies Revonsuo (2010) offers a phenomenologically satisfactory description of altered states of consciousness: "the stream of consciousness sometimes runs through rapids, ravines or waterfalls, sometimes it enters perfectly still and calm waters, sometimes the waters are muddy and at other times crystal clear. The unusual varieties of experience are "called altered states of consciousness" (p. 257). According to the quote above, it is clear that the level of awareness or the luminosity of consciousness represent one of the main conditions of investigating altered states. The second theoretical question is whether the altered state presupposes normal or baseline states of consciousness: "…an ASC is a temporary, reversible state of consciousness that significantly differs from the baseline state, and typically lasts from a few minutes to a few hours at most. Permanent, irreversible changes in conscious experiences, such as neuropsychological deficits caused by brain injury, are usually not counted as ASCs. /…/ One way to define the concept of ASC more precisely is to say that in an ASC, the overall pattern of subjective experience is significantly different from the baseline NSC (normal state of consciousness)" (Revonsuo, *ibid.*).[61]

Nevertheless, the discrimination between baseline and altered states of consciousness is highly debatable. Charles Tart, in 1969, considered altered states as qualitative shifts in the pattern of mental functioning but he gave no answer regarding

[60] Kiraly also emphasizes the "instrumentality" of drug usage showing that by means of psychedelic states the subject gains access to such conscious states that are suitable for surviving and adaptation. (Kiraly, 2014, 4)

[61] Farthing defines altered states in a very similar vein: a drastic change in the overall patterns of subjective experience, which is accompanied by major differences in the cognitive as well as physiological functions. For typical examples we can consider here such states as sleeping, hypnagogic and hypnotic states, a variety of meditative, mystical and transcendent experiences, and all of the psychedelic states of consciousness induced by drugs, etc. (for further discussion see Farthing, 1992, 202-203).

the proportion or "suchness" of the needed qualitative difference (Beischel et al., 2011, 115). According to Rock and Krippner's proposal (2011), newly developed questionnaires should describe the changes in the *phenomenal characteristics* but not in conscious states. In this regard, we can think of alterations in "time sense" or "visual imaging ", but we can also ask such questions that give enough freedom to the subjects to represent the major phenomenal changes in their experiences. This approach does not investigate the structural changes in conscious states, but rather focuses on the intensity alterations of phenomenal characteristics embedded in the whole domain of the phenomenal field in the Husserlian sense. As a result, the seemingly radical difference between normal and altered states of consciousness fades away and the investigation of conscious functions can detach from the endless questions of "normal and pathological" dilemmas (Rock and Krippner, 2011). In sum, we may consider the possibility that the above-mentioned developments will lead us to a kind of *phenomenological understanding of altered states*.

Following this line of thought, the two main dimensions of the investigation of altered states of consciousness are: 1) *the level of conscious awareness*. It has to be mentioned here that the relation between consciousness and awareness is also a complex problem, especially in neuroscience research.[62] In the suggested phenomenological approach here, "conscious awareness" means the level or luminosity of consciousness in conscious states. In this respect, we could think of the characteristic difference between the baseline level of dreamless sleep and the concentrative awareness during cognitive tasks. 2) *The holistic characteristics of the subject's phenomenal field*; as we will see, in visionary states the whole perception of reality can be gradually altered. Visionary states tend to superimpose upon the normal perceptual states; the subject experiences an endogenous source of visions and follows their trace to a place similar but not equal to the dream-world.

[62] "The concepts of 'consciousness' and 'awareness' are often used interchangeably, as in 'visual consciousness' and 'visual awareness': both refer to conscious experiences in the visual modality. 'Awareness', however, is more often used in connection with externally triggered, stimulus-related perceptual consciousness, as in 'awareness of a stimulus'. Consciousness (phenomenal) as such refers simply to the direct presence of subjective experiences, but awareness of a stimulus refers to an entire process of conscious perception wherein an external physical stimulus fi rst physically affects our sensory receptors and then triggers neural responses that travel to the brain, where cortical mechanisms analyse the content of the stimulus and cause a subjective experience that internally represents the external stimulus. To be aware of something thus presupposes that there is some kind of perceptual object out there, behind the experience, and that our conscious experience represents that object; therefore we are 'aware of' the object and have a conscious experience of the object." (Revonsuo, 2010, 96)

Another philosophical-methodological caveat that should be addressed here is the question of "spiritual experiences". Besides the famous term "psychedelic", originally coined by Henry Osmond, another common one exists in the interdisciplinary dialogue, the so-called "entheogen", which alludes to the ceremonial use of archaic psychoactive plants, fungi and animals (Walsh and Grob, 2005a, 2005b.). The word "entheogen" simply means "generating the god within", an expression that symbolizes the positive, mind-expanding, uplifting, and spiritual experiences during certain psychedelic trips and/or therapies. Let us hasten to add that, from the perspective of a modern therapist, spiritual experiences can also easily be interpreted similarly to a psychotic break (as shown above) or a pathological – manic – ego-expansion, which emerged as a common problem of typifying in the late twentieth century's therapeutic approaches. These experiences are often *ineffable* by the experiencer or they may have ridiculous, astonishing qualities according to the third-person observer. We have to take into consideration that a radical phenomenological investigation is burdened with subjective distortions on the part of the experiencer and of that of the critical observer as well; but this fact can lead us to an *alternative phenomenological approach*. In trying to elucidate this phenomenological proposal I will next give a brief account of the contemporary psychological interpretations of psychedelics.

Two basic interpretations exist in the literature about psychedelics and both are burdened with metaphysical speculations. One of the main interpretations is the *depth psychological* explanation based on the works of Jung and Rank.[63] In his certain works, Jung deals with the psyche in a phenomenological manner, that is, he regards the products of *imagination as real as the objects of perception*. Although, when he speaks about his own near-death experience or the concept of meaningful *synchronistic* events and the indistinguishable unity of the psyche and world he is openly ponders on metaphysical questions (Jung, 1973a and 1989). In this context we can interpret psychedelics as *tools* for reaching the *archetypal realm of our psyche*, or we could say that these substances *mobilize* and elevate the *subliminal archetypal pictures into our conscious phenomenal field*. The main issue here is that these – in Jungian terms – *numinous*[64] visualizations or symbols (when presented to the conscious horizon) can be

[63] Further details will be discussed in *Part Three*.

[64] In his work, *Psychology and Religion*, Jung adopts the term „numinosum" from Rudolf Otto (1958, 6-7). According to Jung, it is „… a dynamic agency or effect not caused by an arbitrary act of will. On the contrary, it seizes and controls the human subject, who is always rather its victim than its creator… The *numinosum* is either a quality belonging to a visible object or the

very disturbing and awe-inspiring at the same time. The ego, which inhabits the consensual perceptual world, can undergo very stressful and/or transformative experiences due to the very nature of the unknown affective, somatic, and visual information. Nevertheless, there is a fundamental philosophical difficulty in the Jungian conception of archetypes. Jung had to make a clear-cut distinction between "archetypal images" (that are mostly mythological images mixed with personal memories and meanings) and the "archetypes" *per se*. We cannot fathom the very nature of archetypes as being similar to the Kantian "Ding an sich", however, the polymorphic symbols of archetypal pictures are representatives of the transcendent-metaphysical realm of archetypes (Kugler, 2008, 86-87). Following this logic, psychedelics can improve the mind's capacity to acknowledge and digest the unfathomable depths of archetypes so that we ultimately encounter the "imago Dei/Self"[65] in the deepest layers of our psyche (Solomon, 2003, 556).

It is the most intriguing aspect of the newest research findings that certain psychoactive substances – under proper circumstances – can not only cause the gradual *deconstruction of the ego*, but an *integration process* may follow the seemingly harmful and dangerous ego-dissolution. In depth psychology, "integration" can be roughly defined as the *opposite of dissociation*; it always signifies an interaction between the elements or parts of the psyche. It may occur between the opposing parts of the psyche such as the ego and the shadow, or consciousness and the unconscious, etc. In Jungian terms, this process is inevitable for the *individuation*, that is, the psychological

---

influence of an invisible presence that causes a peculiar alteration of consciousness." (Jung, 1969a, 7)
He explains mystical-religious experiences as being *numinous*, and defines religion as „the attitude peculiar to a consciousness which has been altered by the experience of the numinosum" (Jung, 1966, 6).

[65] The Jungian Self/Selbst can be interpreted as a kind of *universal* which forms the very ontological ground of both psyche and matter. Conscious awareness can never wholly embrace it, nonetheless it may be partially shared through the process of *individuation*. After his break with Freud, Jung fully engaged himslef in investigating the nature of symbolization and its relation to the Self.
Cambray gives a clear definition of the *Self* versus the *self* (i.e. the *ego* or *„ego consciousness"*) in Jungian analytic psychology: „Related to individuation is Jung's larger view of the Self, as the center and circumference of the entire personality, conscious and unconscious. For Jung the ego is merely the center of consciousness, while the Self is the archetypal potential from which the ego complex emerges. The Self serves as the deepest source of motivation for the unfolding and subsequent reunification of the personality; when expressed, its archetypal imagery coincides with the god image though it can also take the negative of this as in daimonic forms – from the ancient Greek, *daimon*, 'a god, goddess, divine power, genius, guardian spirit' [Cambray cites: Wiktionary, http://en.wiktionary.org/wiki/]." (Cambray, 2012, 34)

wholeness of a person, as well as was shown to be essential in the therapeutic process (Samuels, 1986, 83-84).

Winkelman uses the term "psychointegrator" to describe the effects of ayahuasca experiences as they are promoting the course of integration. Complementary to the depth psychological explanation, he argues that – at physiological level – the gamma-synchronization in the limbic system, which is associated with ayahuasca visionary states, is the sign of conjoined information-integration of "innate representation modules". The result of this neurodynamics is that the user's behavioral, emotional, and cognitive capacities begin to show a great deal of integrity – a more harmonic collaboration – that can be expressed as increased group cohesion in a psychosocial context. Increased group cohesion in this context means a growing affective, emotive contact between members of the group/tribe and a more stable self-identity and self-respect (Winkelman, 2002, 1878). Nevertheless, the term of psychointegration is far from being without contradictions, and at present, we are not in a position to consider it as a universal biological or anthropological phenomenon. Shushan raises two main questions from an anthropological point of view: 1) Why is it that the trance state is able to induce transformative effect in certain persons in certain cultures, but in other contexts it can be harmful or goes without any significant results? 2) Are shamans the only "exceptional" persons who possess the capacity to facilitate psychointegration, or is the situation more complicated (Shushan, 2009, 183)? To answer these questions would be an exceptionally hard enterprise and would far extend beyond the original objectives of my doctoral dissertation. Therefore I will not address these aspects in this work; nonetheless, without the prior elucidation of these anthropological issues a complete intercultural approach to psychedelics seems quite dubious, even futile…

Even so, an interesting phenomenological assumption lies in the heart of Winkelman's research: he supposes that the "spirit world" of tribal societies can be decomposed to symbolic elements and these basic categories will be correlated with brain structures in the future developments of neuroscience. Thus, the main point is some kind of neurological underpinning or reduction of the Jungian concept of *archetypes*, this project consequently presupposes a kind of questionable universal

knowledge at the moment, at least from the relativistic and other perspectives.[66] In line with the philosophical and metaphysical dilemmas, it seems – not surprisingly – certain that the integrative mechanism is not a peculiar feature of ayahuasca. According to recent studies, *psylocibin* and *ibogain* are also proved to be similar substances. Furthermore, it is not without reason to argue that *dreaming* also bears a similar function in destabilizing and re-stabilizing self-identity. Winkelman (2002) argues as follows: "Shamanic ASCs involve intense visual experiences that reflect an innate representational system referred to as 'presentational symbolism', the same representational system reflected in dreams (Hunt, 1995). Shamanic visionary experiences are a natural brain phenomenon resulting from release of the normal habitual suppression of the visual cortex." (p. 1879). It is, leastways, worth considering a difference between psychedelic states and usual dream content. Although Jung himself also found similarities between dreams, [67] schizophrenia, and psychedelic experiences, he pointed out that the psychic dynamics of these states are essentially different (Jung, 1972; Hill, 2013, 154).

The second line of interpretation about psychedelics also has a Jungian basis with a more dramatic emphasis on *mystical experiences*. Whilst the first approach is mainly psychological, spiced up with anthropological and neuroscientific findings, the latter appears to be strictly transpersonal. This theory refers to psychoactive substances as catalysts of transcendental experiences and adherents to this theory proclaim that these non-ordinary states can be induced by endogenous processes, such as the ancient methods of eastern practices (e.g. meditation, yoga). Mystical experience is a broader term than transpersonal experience; in case of the former not only the mind-expanding feature is relevant but some kind of "contact" with the "sacred" or "god" is also included in the heart of the experience (Krippner and Sulla, 2000, 67). The mystical interpretations are still more prone to come up with metaphysical explanations. A good

[66] Shushan argues that the *quasi-universal* symbols or archetypal motifs are only *trans-cultural* similarities and not full-blown universal, biological determinants. In the context of a transcultural examination we cannot step out from our own traditional biases because we have no room for an independent platform to make the comparisons without interferences. Our own culture represents our very starting point. Furthermore, we are not in the position to fully examine all of the archaic mythologies. If we systematically scrutinize the symbol system of a specific culture against others, it is more likely to recognize the small differences between the symbols. It is similar to the situation when we make a photograph in high resolution from a city; the higher the resolution the more details become visible. For detailed discussion see: Shushan, 2009.

[67] He even called dreams as "the hallucinations of normal life". (Jung, 1972, 148)

example for this tendency is Aldous Huxley's "perennial philosophy" concept (Huxley 2009).

Transpersonal psychology is by no means a unified project. Following fundamental Jungian assumptions, these interpretations agree that the personal unconscious is not the end of the psychological journey into the depths of the psyche rather a trail that culminates into the chaotic sphere of the *collective unconscious*. The collective unconscious is the hypothetical layer of transpersonal, numinous experiences that can be raised into the sphere of consciousness with mind-altering techniques. Jung was frequently criticized by psychologists and anthropologists when arguing for the existence of the collective unconscious, and he replied, not without animosity, that one who has never been a subject of the *direct experience* of an archetype is not able to comprehend the heart of the concept (Shamdasani, 2003, 266). Although it is a crucial issue to characterize the deep-seated emotive dynamics of the soul, the distinction between personal and collective unconscious is very obscure. Despite the existence of several methodological problems that aim to map the collective unconscious, certain transpersonal psychologists consider it as an insurmountable psychic fact. According to the model of the *holotropic mind* – developed by Stanislav Grof – one can discover the *transpersonal realm* under the layer of perinatal experiences, which consists of the elements of archetypal and/or mythological themes. Grof articulated a kind of "archetypal-cosmology" based on his and others' phenomenological descriptions (Grof and Bennett, 1993). In this regard, the archetypal realm is not only the product of fantasy and memory but it has its independent status in reality. The archetypal spheres of unconscious are as real as the perceptual objects in our ordinary life. Due to this fact, transpersonal psychology is far from acknowledgment of mainstream academic psychology and it is often regarded closer to the New Age movements. Szummer (2010, 2011a) emphasizes that it is not reasonable to mix the original Jungian psychology with the more superficial transpersonal alternatives, since the former was far more original than the latter. The post-Jungian Raya Jones (2007) argues that the contemporary psyche is, in fact, a "narrative psyche" and in the contemporary *postmodern* period a human being can metaphorically be defined as "homo narrans". Thus the self is essentially a "narrative self" and the visual-imaginative workings of the mind (i.e. dreams, visions) are secondary mechanisms in our civilized life-world. However, the evolutionary epistemologist Winkelman (2010) argues that the visual-imaginative modes of the mind are constantly accompanying consciousness. In fact, this idea refers

to old philosophical traditions, as in the late nineteenth century several theories of the unconscious emerged that argued for the all-encompassing presence of the subconscious workings of the soul/mind (Shamdasani, 2003, 182-197; see also *chapter 2.4*).

The transpersonal movement utilizes Jungian psychology as a framework to interpret the outcomes of psychedelic therapies. We can classify the methods of psychedelic-enhanced psychotherapies into two main groups. 1) *Psycholytic therapies:* in this respect the therapist's aim is to gain insight to personal psychodynamic problems, but it is worth mentioning that transcendent experiences could also emerge to surface. Besides, it is quite difficult to clearly demarcate the transcendent and personal experiences from first-person and third-person perspectives, as well. 2) *Psychedelic method:* in this case the therapy is similar to a "horse-kick", that is, the aim of the treatment is to directly "catapult" the subject to the transpersonal realm. The radical underlying view is that the subject will gain a greater opportunity to improve if a sudden "spiritual awakening" occurs, and – in this situation – he or she can "skip over" the individual psychodynamic problems. But let us remark here that psychedelic therapies of this latter kind are usually subjects to innumerable theoretical and ethical debates. The truth is that no general rule for the individual psychic development could be established, there is no clear cut guarantee that some kind of "catharsis or wholeness" will follow the ego-dissolution process achieved by the ingestion of a high dose of psychoactive substance. There is a chance for paranoid, depressive, and other unexpected psychic episodes; these symptoms mean that the subject is unable to integrate the shocking experiences into his or her personal belief-structure when suffering the attacks of repressed emotions. Another drawback could be the case when the subject gets stuck in the freezing state of ego-dissolution. It is an open question to what extent could the psychedelic therapy contribute to ego-development and facilitate adaptation. Moreover, the manifold of transpersonal terms (ocean consciousness, pure consciousness, omega experience, oversoul, etc.) is a clear sign of theoretical eclecticism that surpasses the Jungian framework. The phenomenal richness of unconscious images and symbols can be a great obstacle to discursive thinking; the theoretical frameworks never exhaust the varieties of psychic manifestations. For this reason, the acknowledgement of epistemological and methodological barriers may lead the way to more sophisticated phenomenal investigations (Walsh and Grob, 2005c, 252). In conclusion, as we have seen above there are arguments that encourage us to

mobilize certain phenomenological and psychological principles to approach the problems of imagination, vision, and hallucination.

For a theoretical survey of psychedelic experiences a depth psychological and diverse transpersonal framework might be relevant, however, the main contextual problem henceforward is the contradiction that emerges between the *universal* and *relativistic* approaches which represent the main battlefield of contemporary critique. According to the postmodern movement of deconstructionism, archetypal symbols and images are not essential forms of the unconscious. Vernon W. Gras (1973) contends that it is merely a metaphysical speculation to preserve the concept of an unhistorical *universal mind*, which exists without concrete/cultural situatedness. These theoretical debates are reflecting the above-mentioned critiques of Jung's collective unconscious. According to the anthropological critiques of Jung, archetypes are not archaic vestiges of the mind and body, but culturally transmitted habits and symbols.[68] Mythological themes and/or archetypal images are only certain features of a specific culture, there are no universal forms or the expressions of a transpersonal realm (i.e. the "objective psyche" in Jungian terms). However, Paul Kugler (2008), following a historic survey on the role of images in Western philosophical culture, re-established the role of images in our time. For him, *images* (the products of imagination) are not only "historical constructions" or "universal essences" in the universal mind rather the expressions of the trans-objective and trans-subjective unknown. Kugler reformulates and modernizes Jung's numinous experiences, when he argues that the images and visions are the awe-inspiring bridges to the *sublime*. The "sublime" is a direct expression of the unknown depths and heights of the psyche. It is right on the verge of discursive thinking:

> "Psychic images signify something that consciousness and its narcissism cannot quite grasp, the as yet unknown depths, transcendent to subjectivity. And this depth is to be found in both the world of objects and the world of ideas, history and eternity. What the image signifies cannot precisely be determined, either by appeal to a difference or universal." (Kugler, 2008, 89)

[68] The concept of archetype was not the only that were criticized, Jung's theory about tribal cultures was also in the firing line in the early twentieth century. In 1927, the contemporary anthropologist Paul Radin argued that both Lévy-Bruhl and Jung (as his follower) considered the tribal culture as a misty vision of the western mind: full of sentimentality and plain ignorance. This definitely shaped Jung's view about the "primitive". (Shamdasani, 2003, 328-329)

Kugler tries to navigate between the Scylla of metaphysics and the Charybdis of relativism by means of the notion of the sublime; the aesthetical and affective experiences are the golden means to transcend these unbearable psychic opposites. This reasoning seems to be an eloquent alternative to apply the metaphysical independency of the phenomenological stance. To what extent can we fathom the diabolic features of altered states of consciousness? Phenomenology gives an ontologically independent method to analyze the spheres of *being* where scientific schemas could be too narrow or one-sided… In the case of psychedelic experiences (e.g. ayahuasca visions), the psychological and aesthetical effects may imply profound lively experiences that can be experienced as vivid as the perceptual experience. It is not without reason to suppose that visions have special features that can be investigated by means of the subjective accounts and key concepts of consciousness and phenomenological field. The main concern here is whether there are any innovative frameworks to reinterpret the psychedelic journeys besides the above mentioned transpersonal and depth-psychological alternatives?

3.2 "More real than real" – The paradoxical phenomenology of psychedelic visions

Terence McKenna (1992), the famous and provocative psychonaut, argues that visions possess the characteristics of an independent "spectacular language". Apart from this, however, the DMT state is definitely an "intellectual black hole"; it is a very challenging situation to make sensible statements about these prelinguistic experiences:

> "This hallucinogen induced phenomenon isn't like that; it's simply a brain state that allows the expression of the assembly language that lies behind language, or a primal language of the sort that Robert Graves discussed in The White Goddess, or a Kabbalistic language of the sort that is described in the Zohar, a primal "Ursprache" that comes out of oneself. One discovers one can make the extra-dimensional objects – the feeling-toned, meaning-toned, three-dimensional rotating complexes of transforming light and color. To know this is to feel like a child. […] It seems to me that either language is the shadow of this ability or that this ability will be a further extension of language. Perhaps a human language is possible in which the intent of meaning is actually beheld in three-dimensional space." (McKenna, 1992, 34-35)

In the unusual state of tryptamine hallucination not only a unique fusion of perceptual modalities can be observed, but the paradox nature of *affection* comes into sight as well. If we try to observe our emotional tones in our daily routines, we realize that our actual mood is happiness, regret, sadness, melancholia, and so on. We are prone to imagine a better future while going to our office, or ruminating on childhood memories on the train, or just fantasizing about a Hawaiian holiday in the midst of a winter storm. Contrary to the normal waking state, during DMT visions the different modalities of consciousness produce a synesthetic experience that is filled with – in Jungian terms – feeling-toned complexes, seemingly ancient (archetypal) memories, and fractal-like, geometrical forms. While our phenomenal experiences are more or less predictable in waking states, a formidable chaos begins to rule in visionary states, which is dominated by emotional (or perhaps numinous) experiences:

> "But the experience must move one's heart, and it will not move the heart unless it deals with the issues of life and death. If it deals with life and death it will move one

> to fear, it will move one to tears, it will move one to laughter. These places are profoundly strange and alien. (McKenna, 1992, 34)

In these visionary altered states the subject leaves his habitual patterns and his own identity behind and in some cases may undergo a radical transformation in a symbolic cycle of life and death. The loosening of identity makes a vacuum in the subject's mind, and more profound inspirations and affections about personal life come to the surface; metaphorically speaking, strongly suppressed existential dilemmas and traumatic memories may imbue the field of subjective experience. Long forgotten elements of the personality could be reintegrated into a new form by means of a heightened conscious-awareness owning to the eruption of subconscious contents into the sphere of the phenomenal field. Naturally, the profound, or occasionally shocking, experiences are not enough for self-transformation *per se*, the interpretation of visionary states is a therapeutic – interpersonal – process. The experience is only a step of the development but not the ultimate aim. The visionary state is not a "miracle" by itself rather a significant stage in the process of integration of the split-off aspects of personality. Winkelman (2002) considers this binding mechanism to be a very powerful and ancient brain function. The synthetic connection of perceptual modalities seems to be a very new phenomenon to modern man, but this is an illusion, since in archaic tribes this mode of "symbolic thinking" was well known and eagerly cultivated. Winkelman, after Hunt's work, introduces the term "presentational symbolism" to signify the phenomena of visionary world. In doing so, he made a qualitative distinction between visionary experiences and hallucinations. He argues that visions can be interpreted as full-blown dream sequences penetrated into the sphere of conscious awareness. The *presentational symbolism* differs from the *representational contents* of the mind which are perceptual and linguistic mental entities. The former mode of cognition can be correlated with the function of *limbic structures of the brain*. However, recent neuroscientific theories are constantly changing and it is possible that, besides the limbic structures, the *frontal and temporal brain structures* also have significant role in the genesis of altered states. For instance, in case of out-of-body experiences the *temporo-parietal-junction* is one of the most distinctive brain areas. All in all, according to Winkelman, the archaic limbic system can be understood as the very basis of intuitive knowledge acquisition, which operates with metaphors and archetypal images (Winkelman, 2010, 20).

Benny Shanon (2003) approaches ayahuasca visions in a cognitive-psychological way and emphasizes the polysemy of visions based on his own and others' phenomenal accounts. In the realm of visionary states, the duality of meaning-constitution (or interpretation) and perception can be conjoined into an intriguing oneness:

> "My general theoretical stance in cognition is that there is no demarcation line between 'raw' perception, on the one hand, and semantic, meaningful interpretation, on the other hand. Following the philosopher Merleau-Ponty (1962) and the psychologist Gibson (1979), I believe that it is impossible to draw a clear-cut line dividing between naked, interpretation-free sensory inputs and interpretative processes that are subsequently applied to them so as to render these inputs into meaningful percepts. In the spirit of Heidegger (1962), I maintain that cognition is always 'laden with meaning'." (Shanon, 2003, 253)

Shanon points out that Merleau-Ponty – among other philosophers – has shown unambiguously that every conscious intention has an inherent meaning and, in line of this thinking, visions must also possess intentionality. In a very delicate manner he tries to make a radical phenomenological distinction between hallucination, perception, and vision. He attests that visions stand closer to *perception* as compared to hallucinations in a manner that visions have meaning and are able to induce *ontological commitment*. Shanon claims that visions have such powerful, meaningful, and figurative features that they are almost able to mimic perceptual reality and they can compete with the vivacity of our ordinary life. Shanon comes up with a useful analogy to exemplify the workings of perceptual experiences. Suddenly, when we wake up from a dreamless sleep, the whole world opens up in front of our gaze with its own totality and complexity. In this respect, we never reflect upon the elemental features of color perception and Gestalt-constitution. For example, in the midst of the observation of a flower the interwoven relationship of perceptual world and bodily self-affection[69] constitutes the horizon of the world with an embedded ontological certainty. If I suddenly turn my gaze to a perceptual object, the very object stands in front of me as a *perceptual fact*, there is no

[69] In this context, *bodily self-affection* refers to the visceral, volatile, formless, changeable inner body-experience that can be interpreted in the phenomenological tradition as the body-subject or lived body (*der Leib*). See also: *chapter 2.5*, especially *2.5.1.*

room for doubt; I unabashedly believe in the reality of the object of my conscious intention. However, the cases of altered mental states (e.g. hallucinations) or radical philosophical skepticism might lead us to disbelieve in our perception. Shanon took great pains to demonstrate that the phantasmagorical sphere of visions can be as lively and animated as the objects of perception. One can promptly find oneself in a distinct, virtual world where new, independent laws rule: "However, in its totality the experience transcends the visual and is felt to be a reality in which the drinker is immersed. For this reason I refer to it as a 'virtual reality'." (Shanon, 2003, 92)

A strange, self-referential paradox appears when we attempt to seek for an appropriate metaphor in order to describe such a conscious state, which itself fundamentally consists of metaphorical and symbolic manifestations. Nonetheless, Shanon follows this line of thinking to show and demonstrate the narrative and visual features of ayahuasca experience to those who have never experienced such non-ordinary states. Shanon claims that ayahuasca visions can be interpreted as a stage-play that is quite assimilative to the unsuspecting viewer:

> "Yet it seems to me that phenomenologically it is very clear: When a vision is grand, there is no question about it, it is grand. Applying again the cinematographic jargon, I would say that the difference between a scene and a grand scene is analogous to that between a video clip and a veritable cinematographical or theatrical masterpiece." (Shanon, 2003, 92)

At the beginning of the trip, the drinker of the brew experiences the regular enthralling visions. However, time to time, the visions become more powerful and the scene becomes similar to a stage-play in which the players come down from the stage closer to the viewer. Furthermore, a more disturbing effect begins to form: the viewer becomes the part of his vision as a member of the visionary players, and in the extreme, the viewer is the player and the director of his visions at the same time. For Shanon, it is expedient to say that *the visionary experiences are not only seemingly real, but in a bizarre manner, they can be "more real than real"*. In this respect, *reality* can be equated with the ordinary states of everyday life. Ayahuasca's powerful effect lies in the so-called *presentations*, which means that "Ayahuasca may act as a kind of time machine whereby we may observe past and perhaps future events perceptually, as if they were taking place in the present." (Shanon, 2003, 203)

Shanon is inclined to think that visions facilitate the capacity of *intuitive pre-verbal* knowing, which can be the underlying layer of perceptual reality, as well. Furthermore, regarding this intuitive-cognitive knowledge, it does not matter if we consider the visions as hallucinations or fictions.[70] The Visions, thus, are similar to perception because they bear some kind of self-evident knowledge for the subject. However, they do not appear as some sort of representational knowledge – as ordinary perception does – rather they *present* their meaning inherently in their images and symbols. Shanon argues that ayahuasca experiences are fully transparent from the first person point of view as the *qualitative content* of the visions is – at the same time – the main source of meaning, as well. In the case of visions, aspects of *meaning, interpretation, and the figurative elements* are strongly interwoven (Shanon, 2003, 242-256). Shanon presents innumerable first person accounts about how can be the simple figurative elements (e.g. iconographic pictures, dynamic visions) infused with the thematic elements of personal, emotionally-filled memories. It seems that the pictorial sphere of visions are not only the product of imagination, but also some kind of meaning constitution takes place by means of the mixture of figurative elements and memories. Of course, imagination still has a dominant role in the visionary realm but in this state of mind one cannot discriminate sharply between the intentional states of imagination, affection, or perception. We are bound to concede here that a profoundly entangled meaning-constitution takes place in visionary states. Or we can also say that a *very intense* form of sense-creation happens in the climax of the psychedelic trip. In our ordinary life, affection, emotion, thoughts can all be differentiated in introspection, but in the realm of visions these basic functions tend to make up chaotic, undifferentiated contents.

Shanon contends that during an ayahuasca trip the symbolic meaning transforms into the literal. *This means that the vision is such a figurative visualization that possesses a direct semantic content.*[71] We tend to see figures in clouds in our ordinary states, but in the world of perception we are aware the fact that these figurative elements are nothing but products of our own consciousness or imagination. However, in case of visionary states the above-mentioned *schematism becomes so powerful so that the tripping subject is unable to decide which figurative elements are real and which are*

[70] Shanon asked a ceremony leader for a definition of intuition. The leader answered: "Knowing things in that manner that is ordinarily encountered in perception." (Shanon, 2003, 203)
[71] Shanon, *ibid*. 254.

the products of his imagination. Unfortunately, due to the very nature of such visions, a serious doubt is cast on the possibility of examining the aspects of object – and meaning – constitution, which would be a clear-cut phenomenological project. Visions are dominated by the confusion and perplexity of the perceptual and visionary information:

> "What has impressed me very much in ayahuasca induced seeing-in is the richness of the hallucinated figures and the complexity of their features. When examining the details of these figures, again and again I was stupefied. On the one hand, these details fitted so well with the figure of my imagination while, on the other hand, they are seemed to be generated from the texture of the real array actually in front of my eyes. Later, when the intoxication had ended, I would approach the array and inspect it closely and I would not be able to fathom how the imagined figure arose from it." (Shanon, 2003, 254)

From the perspective of psychology, of course, these visions can also be considered as hallucinatory experiences. For instance, Shanon saw running panthers or hanged people on a tree in a forest, which were obviously not present in the perceptual field from the viewpoint of another person. However, from a phenomenological perspective, these "hallucinatory experiences" have a strange relevance. We can find an opportunity to examine the "dialectical" relation between consciousness and its objects in the constitution of meaningful experience. Evidently, several visionary experiences have the effect of self-dissolution that is similar to a psychotic break or other hallucinatory experiences, but the features of vision might be discriminated from the pathological in many respects, as mentioned above. "Vision" and "hallucination" are relatively well separated concepts if we take into account the specific phenomenological features of the experience. In case of low dose trips, despite the radical change in sensory modalities, the subject's basic experience is that he actually is aware of having a vision, and – at least partially – remains conscious about things related to both the *reality here-and-now* and the *reality beyond* (i.e. he operates in two, or more *realities* or *worlds* at a time). A typical example is based on previous reports: during the healing rituals, the drumming or psychedelics make the subject – although still operating in the visionary world – stay connected to his body and physical reality. Following moderate ayahuasca ingestion a level of self-reflection and motoric ability is still working. The subject knows that he "travels". This particular cognitive situation also allows him to

accurately remember and then reconstruct the details of the lived experience (e.g. a traditional shaman brings information, "teachings" from the world of spirits). In contrast, hallucinations – *per definitionem* – are always completely realistic in every sense and cannot be separated from the lived experience of physical reality, since it is completely built in the subjects' phenomenal field (Farthing, 1992, 209). While a hallucinatory experience is more or less frightening and disturbing, visionary experiences usually have *fascinating aspects*, which can be theoretically equated with Jung's feeling-toned or numinous unconscious archetypal images. The fascinating vision can easily alter the subject's inner bodily experiences and it can also cause sublime aesthetical experiences. In ayahuasca experiences, argues Shanon, a new world – some kind of *animistic world* – rises to the surface, in a sense of a more common metaphor, we can say that a new layer of "reality" is superimposed onto the perceptual phenomenal field, which is able to prove its *ontological independency* to the viewer's mind by means of the affective and visually stunning features of the experiences.[72]

What are the consequences of the relation emerging between fantasy and vision? The most common concept of fantasy can be explained as a deficient mode of perception (Ullmann, 2012). In our ordinary waking state we can recognize the lively presence of an outer object by means of our perceptual modalities, but in the case of fantasy we find ourselves among the shallow, foggy images of our imagination. Daydreaming is a concomitant phenomenon of everyday life, but fantasy images in this case have no ontological status from the viewpoint of perceptual strength. If we turn our attention to the disparate nature of perception and daydreaming we can thereby determine a clear-cut distinction between the perceptual objects and phantasmagorical shadow-images. On the basis of Shanon's descriptions we can speculate that the sphere of visions could function as an independent field of phenomenological investigations.

At first glance, it might be argued that visionary experiences are some kind of fuzzy states between perception and fantasy, but the already mentioned ontological pressure of the experience might raise the possibility that a vision is a *unique*, independent mode of consciousness ruled by the features of *presentational symbolism*. It is tempting to propose the idea that visions are *independent phenomenological realms or dimensions* that are relatively but not ultimately separable from fantasy and

[72] "While I have been concerned with philosophy for years, ontology has never been of special interest to me. In fact, my basic position was that psychologists should not bother with ontology at all, and that when engaged in cognitive research they should not be concerned with ontological questions. The Ayahuasca experience forced ontology on me." (Shanon, 2003, 165)

perception. In a sense, a simple daydreaming is also capable of encapsulating the subject from his perceptual surroundings counter to the constantly stimulating environment. Besides, in ordinary daydreaming or in a dream (especially during lucid dreaming) we can realize in some cases that we are simply in a dream, but this recognition actually happens in the middle of a dream or a fantasy sequence. However, in case of visions, this kind of "sliding" takes place in an instant with *heightened awareness* and with shocking vividness. The special feature of an ayahuasca vision is the already mentioned conscious awareness, which can open the door to the realization of shifts between perceptual and imaginative reality. Shanon argues that the best contemporary interpretation concerning ayahuasca experiences is to consider the *unlimited possibilities of imagination and creativity*. A curious, disturbing aspect of these visions is the fusion of self with others, or the fusion of the inner and outer worlds:

> "With ayahuasca, the boundary between the inner and the outer reality may dissolve. One may feel that one's I is blended with that of others, that one immerses oneself in the world and becomes united with it, that there is no neat distinction between one's internal mental world and one's perceptions of the external world." (Shanon 2003, 200)

Regarding the types of self-dissolution scenarios, we could consider a remarkable form of ayahuasca experience: the experience of transformation. As discussed previously in *Part One,* there is a useful distinction in phenomenological literature between the "organic body" (*der Körper*) and the "lived body" (*der Leib*). The basic distinction comes from Husserl and Merleau-Ponty, but similar definitions e.g. body-schema, body-image, are useful explanatory tools in the literature of embodied cognition (Gallagher and Zahavi, 2012). The reinterpretation of self-dissolution and transformation experiences with the phenomenology of lived body might be an innovative and novel philosophical approach.[73] The peculiar characteristic of the phenomenal or lived body is that it is not equal with the intentional body image (the image in the mirror), but by means of its proprioceptive and interoceptive feelings it also has a significant role in constituting a bodily self. The organic body, naturally, is

[73] As has been shown in *chapter 2.5*, „lived body" refers to the lively but elusive inner feelings and kinaesthetic experiences of the body.

the subject of anatomy and other biological sciences that investigate the body from third-person view. Here it is worth to speculate that phenomenological investigations could be extended to examine altered states of consciousness (e.g. ayahuasca visions) concerning the vague feelings of the interrelation of the self and the world. While in these cases the organic body remains naturally intact, the lived body, the subjective, obscure, formless body feeling is very malleable. Merleau-Ponty was interested in the cases of phantom limbs and other pathologies of bodily-representation. Here I argue that the transformative ayahuasca and self-dissolution experiences could be incorporated into this phenomenological framework outlined in *chapter 2.5*. This radical shift means that *in the imaginative realm of visions the lived body is capable of mimicking the other gender's and other species' inner body states in a very vivid, realistic manner.* The transformation of the lived body also involves body-image distortions as it was observed is Grof's classic LSD-experiments (Grof, 2008, 144). Drinkers of ayahuasca, including Shanon himself, reported subjectively observable changes in the lived body and the body-image at the same time. The body-phenomenology framework can describe the classic shamanic journeys and transformations – that are generally understood as some kinds of mystical, spiritual phenomena – in a very detailed way, without any radical ontological commitment. This theoretical step is not the *demystification* of shamanic cosmologies, rather an expansion of Shanon's culturally neutral phenomenological investigation.

Shanon specified several examples of transformational experiences: an ayahuasca drinker experienced himself as a baby, another one felt that he transformed into his own mother; Shanon himself once felt the inner bodily feelings of an elephant. In another case, he found himself in the midst of an ant colony or transformed into a cheetah. He and other users felt the experiences very real and enjoyable (Shanon, 2003, 211-220). We can also find ridiculous or bizarre accounts: one drinker transformed into a nymph, others transformed into a statue or plants. The most general pattern is to transform into some kind of animal. The skeptical eye sees these extraordinary accounts as playful fantasy-games, and in a certain manner, it is right. Shanon does not stress the mystical reincarnation option rather he is also prone to advocate an explanation based on *imagination and empathy*.

If we want to stick to phenomenological neutrality we cannot plunge into ontological speculations. The transformation interpretations by the term of lived body do not mean that these experiences can be reduced to body-image deformations of the

organic-body (i.e. neurological malfunctions). Merleau-Ponty's merit was exactly to transcend the psychopathological, mechanical explanations, and following Merleau-Ponty's intentions, Shanon was able to describe the changes in the felt lived body in a very fine-grained manner. On one occasion, he was frightened by a vision during which he saw and felt his arms turning into a jaguar's palm. However, in another case, the transformation completed and he found himself in a grand vision of a forest, hunting amongst a jaguar folk. Another person experienced a metamorphosis into a cheetah and in this new visionary body he begun to hunt a deer (Shanon, 2003, 213). Let us examine Shanon's description about the "calibration" of the lived body:

> "Associated with identity transformations are changes in the calibration of one's body. Thus, when undergoing animal metamorphosis one may feel that the very texture of one's body changes. This may be coupled with visualization. For instance, as mentioned above, I once felt and saw my palm and arm turning into the heavy and hairy paw of a puma. Radical changes in calibration are also experienced in conjunction with perceived self-death. In this context, the experiences of paralysis and of numbness were reported to me by several informants. Changes in the texture of the face and the skin were also reported." (Shanon 2003, 214)

It seems that the ego-death is some kind of preliminary stage of the transformational experience, but Shanon is reluctant to consider a definite regularity in these chaotic experiences. It may be that these metamorphoses can be explained as intricate workings of the lived body. Actually, this model may serve as an outline or framework for these experiences, but the chaotic and undetermined features of this imaginary world still remains a mystery. Apart from this, I propose here that the basic phenomenological concepts are useful tools to reinterpret these kinds of otherworldly, alien experiences. Nevertheless, Shanon's phenomenological investigations are good examples for the need of "practical phenomenological investigations" in the discourse of consciousness studies and embodied cognition.

3.3 A possible phenomenological approach to altered states in philosophical and psychological investigations

Let us bring forth the question of psychointegration again. Since the key feature of psychedelic states is the shattering of habitual self-image and that of the ordinary phenomenal field, the psychopathological viewpoint – not surprisingly – sees only the *symptoms of psychosis* in these formidable experiences. However, as it was shown previously, ego-dissolution is only a transition in the experience, for a reintegration process always follows the de-integration. When traumatic experiences appear in these visions, the subject can "re-live" or "re-integrate" those emotional disturbances. This "cathartic" function of visions significantly differentiates them from the disturbing experiences of hallucinations. In this argument, however, we must be very careful since the psychological dilemma of *psychointegration* is a very complicated topic. As discussed briefly above, the term psychointegration can be seen in the Jungian literature as well. In Jungian depth psychology there is a mysterious psychological process, the so-called *transcendent function*, which can integrate activated unconscious contents that have been manifested through dreams, fantasies, etc. into the conscious mind. For Jung, integration in this case always means a positive, constructive, synthetic process happening between the activated unconscious material and consciousness. It is indeed a *function* of the psyche that "arises from the union of conscious and unconscious contents" (Jung, 1969b, 69).[74]

Psychointegration means some kind of adaptation that takes place in case of the radical one-sidedness of consciousness. Psychointegration, as the heart of the unconscious compensation process, is one of the basic building blocks of personal development and adaptation. However, there is a common dilemma in the discourse of both analytical psychology and psychedelic therapy. There is no way to find a universal method for psychointegration, and there is no substance that could be called the perfect psychointegrator. Ingestion of traditional psychedelic decoctions such as ayahuasca in the proper ritual setting has already been suggested as a possible mean of psychointegration including many other positive cognitive effects (Frecska and Luna, 2006; Frecska et al, 2012). Nevertheless, we have to keep in mind that, from a

[74] It must be emphasized that Jung does not mean a literal *union* here. Rather he „is referring to a uniting of consciousness and the unconscious in the sense of bringing them together through an interaction that can lead to a *balanced relationship between the two*, which he characterizes as psychological wholeness." (Hill, 2013, 138; *italics added*)

phenomenological point of view, in most of the cases these bizarre experiences obtain their meaning from the personal and cultural context. Shanon (2003) and Winkelman (2002) propose that presentational symbolism is some kind of intuitive knowledge that gives its very meaning to the subject directly, but from the perspective of phenomenology and hermeneutics we have to bear in mind that it is the *interpretation* that always *helps to integrate* the experience. Shanon strongly argues that metamorphoses and other visionary experiences have the effect to amplify one's ability to practice *empathy* and *understanding*. The visionary world can be considered as a virtual theatre in which we can put on the garment of other persons' and beings' lived body. In these situations, the gap seems to be closing between two subjects: "The vision made the informant understand her friend's psychology from a new perspective, one which she found insightful." (Shanon, 2003, 212) However, it would be a very far-fetched analogy to state that in the psychedelic realm there are definite rules or laws similar to the seemingly very stable phenomenal field of perception. One of the main concerns of phenomenology is to explore the pre-conscious aspects of perception. In this respect, the investigation of altered states would be a fruitful exploration, as well.

In this part, my primary aim was to point out to the special dynamics between consciousness and its experiential contents (that could be either a "real" outer object or a visionary, mythological one). I briefly brought forth the Jungian and psychedelic interpretations of altered states and the transformation of the lived body especially in ayahuasca visions. I prefer to approach the topic in a special phenomenological way continuously bearing in mind that the usual distinctions between veridical perception and imagination are hardly useful in the phenomenological description of psychedelic visions. Altogether, I propose that the mobilization of classic and basic phenomenological concepts when discussing about psychedelic states might be a complementary, stimulating approach to the naturalistic, scientific investigation of mind. In the interdisciplinary research of altered states, first-personal accounts and classic-philosophical phenomenology may give theoretical frameworks in which the investigator tries to be as close as possible to the lived experiences and this collaboration can be seen as a new kind of phenomenological investigation beyond the range of ordinary perception.

In sum, *Part Two* was aimed to establish three definitive parts of my thesis:

1) Altered states of consciousness including psychedelic states (e.g. ayahuasca visions) possess the potential to *restructure the phenomenal field* of the subject by *mobilizing and surfacing so far hidden or repressed unconscious contents*; these contents can then be analyzed by following the "phenomenological rules" of the genesis and transformation of symbols and thus can be subjected to further philosophical investigations;

2) These states are also frequently associated with the de-construction of the ego ("ego-death") which is followed by a re-construction phase intrinsically regulated and controlled by *the transcendent function* (due to the classic Jungian and post-Jungian analytical psychology);

3) In psychedelic states, the *phenomenal lived body* exhibits a vast plasticity in terms of its experiential features and operative capacities; thus *I propose a feasible way of manipulating the Leib while in these states*.

This approach can be integrated into a novel type of psychosomatic model in which ASCs and the phenomenological method can serve as tools for a better understanding of mind-body relations and as a hybrid apparatus for novel body-oriented therapies in psychosomatics. In *Part Three*, I will gradually outline this model on the ground of the previous chapters.

4. PART THREE

ALTERED STATES OF CONSCIOUSNESS AND PSYCHOSOMATICS IN A JUNGIAN AND POST-JUNGIAN CONTEXT

"I would suggest the early twenty-first century has become a time of brain mythology with neuroscientific verification of the archetypal truth."

– Joseph Cambray

In this part my goal is to show the mutually enlightening relation of psychedelic states and Jungian psychology in philosophy and biomedicine. Based on *Parts Two* and *Three*, I propose the hypothesis that altered conscious states, including psychedelic ones, can be understood as results of a psychodynamic process regulated by the ego-Self axis. In this respect, Jung's synchronicity, Reich's body-oriented therapy, the mechanism of the placebo-response complex (originally developed by Richard Kradin) and altered states of consciousness are in strong correlation. After showing that the working mechanism of placebo-response complex and psychedelic altered states are based on the self-regulatory role of the Jungian transcendent function, I will try to outline a general model of psychosomatics that involves and integrates the Jungian complex-psychology and modern embodiment theories. It will be continuously emphasized that altered and psychedelic states require careful therapeutic settings due to the shocking experience of de-integration and re-integration of the ego complex. In conclusion, I hypothesize that altered conscious states can be considered as parts of an unique healing mechanism highly resembling to the psychosomatic features of nocebo/placebo-response complex with promising therapeutic potential in the treatment of various psychosomatic diseases when co-applied with embodiment-rooted approaches. Thus the idea of "Leibanalysis" will be proposed.

4.1 Possible therapeutic outcomes of psychedelic states – historical and practical considerations

As we have discussed earlier, several prominent advocates of philosophy and neuroscience have made suggestions and assertions regarding the nature and explanatory possibilities of altered conscious states (Gallagher and González 2014; Metzinger 2010). In the era of the psychedelic revolution – the 1960s – altered and psychedelic states were very popular in the emerging fields of humanistic and transpersonal psychology, and nowadays this trend seems to be rejuvenated as many academically relevant journals publish a diverse range of naturalist models about the nature of ASCs, such as near-death experiences and out-of-body experiences (Morse, 1994; Parnia and Fenwick, 2002; van Lommel et al., 2001; van Tellingen, 2008; etc.).

The socio-political aspects of psychedelic drugs are not our main concern in this work; however, it might be important to – at least briefly – warn against the possible negative outcomes of usage and the ambivalent relation between controlled-therapeutic and illegal use:

> "The impressive safety record demonstrated under controlled research conditions did not necessarily extend to uncontrolled use. For years it was not possible to establish a fair and objective hearing on the relative risks and benefits of the psychedelic model, due to the fears based on the tragic outcomes of some cases of nonmedical use." (Grob and Bravo, 2005, 11)

The irresponsible over-enthusiasm of Timothy Leary's circles and the ecclectic-utopianisms of many of that age rendered the topic of psychedelic drugs a socioculturally complex and delicate problem. Fortunately, around the new millennia, in line with the increasing interest regarding altered states of consciousness, the topic of psychedelic experiences was revitalized in several disciplinary contexts. Besides the investigation of naturally occurring altered states, the research on hallucinogenic compounds is extended by several double blind and placebo-controlled experiments: the main subjects of this inquiry are cannabis, salvinorin, ibogain, psilocybin, MDMA, and ayahuasca (Winkler and Csemy, 2014, 14). One of the methods to track down psychological-phenomenological alterations of subjective experience is the *Hallucinogen Rating Scale* (HRS) developed by Rick Strassman and his colleagues

which measures the changes in cognition, especially in the dimensions of affectivity, perception, and bodily experience (Beischel et al., 2011, 125-127). Newest findings suggest that ayahuasca is capable of unveiling psychological blocks and give insights of long forgotten emotional memories (Blainey, 2014, p 7-8). There is a growing interest among scientist to investigate not only altered states – induced by psychoactive compounds –, but to also physiologically and psychologically characterize meditative states (i.e. djana, samadhi), the above mentioned OBE and NDE phenomena, and last but not least mediumistic ones. The technic of mindfulness meditation, rooted in the dialogue between neuroscience and meditative traditions, can be seen as a way of self-reflection that allows stress reduction, decrease in anxiety symptoms and facilitates the reflection of ingrained habits. Not surprisingly, it has already been integrated into the repertoire of cognitive behavioral therapies (Weng et al., 2013). The study of meditation is at least as complicated as the evaluation of psychedelic drugs. A recent research study shows similarity between meditation-induced hyper-synchrony and partial epileptic seizures in the brain. In consequence, there is a growing need to determine precisely the pathological and normal modes of brain synchronization. Meditation praxis, by controlling unusual brain-states, could be a potential tool in treatment of clinical disorders induced by excessive synchrony and excitability in the brain (Lindsay, 2014). In line with the researches on meditation, psychoactive drugs exhibit renewed potentialities of therapeutic outcomes. According to the recent literature, the endogenous tryptamine DMT may be of particular medical importance since its role may not only be relevant in hallucinatory states but it may play a significant role in the protection of neurons under stressful conditions, the regulation of immune responses, as well as in the modulation of various processes in human physiology (Frecska et al., 2013; Szabo et al., 2014; Szabo, 2015b).

Huxley argues, without hesitation, that an archaic renaissance is needed in western civilization; he ruminates about the option that religious rituals (dominated in the Bronz Age) could bring about the earthly paradise for modern man, who now suffers from the symptoms of alienation in the capitalist civilization. It is important to note that, for Huxley, not only the panacea (Soma) is the tool in the course of eliminating the alienation of modern man, but the *ritual* is also crucial. The psychedelic experience is not so calculable like a ball rolling down in a slope; a conscious therapeutic (hermeneutical) interpretation is required. The psychedelic revolution in the 1960s promptly demonstrated that the *setting* (environmental circumstances) and the *set* (the

dispositions, expectations, and the physiological-psychological profile of the subject) are relevant factors in the quality and process of the experience.[75] Nevertheless, while in case of NDEs the "mystical experience" is spontaneous and unforeseeable, in contrast, psychedelic therapies could give a relative control in case of quantitative and qualitative research studies.

The introduction of contemporary psychedelic research would be incomplete without the notion of the obscure term of *spirituality*. A study by Moro and his colleagues (2011) demonstrated that the main motivations of psychoactive drug usage are to facilitate self-enhancement, self-actualization, and to dissolve suppressions. In normal circumstances psychedelic substances are considered physiologically safe, and in appropriate therapeutic situations, they can induce specific beneficial mental states. However, in some cases – especially in inadequate circumtances – "dormant psychiatric conditions" and "recent unprocessed traumas" could lead to adverse reactions (Moro et al., 2011, 189-190). In spite of the uncertainty principle of psychedelics, the meaningful and therapeutically processed psychedelic experience markedly differs from a "junkie" euphoric drug-experience. The significant difference between the self-enhancing psychedelic state and the escapist drug-experience was a meaningful question in Huxley's writings, as well:

> "William James, in his Varieties of Religious Experience, gives instances of 'anaesthetic revelations', following the inhalation of laughing gas. Similar theophanies are sometimes experienced by alcoholics, and there are probably moments in the course of intoxication by almost any drug, when awareness of a not-self superior to the disintegrating ego becomes briefly possible. But these occasional flashes of revelation are bought at an enormous price. For the drug-taker, the moment of spiritual awareness (if it comes at all) gives place very soon to subhuman stupor, frenzy or hallucination, followed by dismal hangovers and, in the long run, by a permanent and fatal impairment of bodily health and mental power." (Huxley et al., 1977, 25)

[75] One of the main reason why psychedelic drugs become illegal is the careless usage: "Ultimately, the combination of government misuse and a perceived public health crisis brought research to a crashing halt. Countless young people heedlessly ignored admonitions to be attentive to set and setting, and instead recklessly used psychedelics in dangerous and uncontrolled recreational contexts. Likewise, the ethically suspect activities of government intelligence operatives and grantees eventually surfaced, which also undermined legitimate and potentially valuable psychedelic research." (Grob and Bravo, 2005, 9)

Psychedelics can be and should be psychologically and physiologically separated from hard drugs or narcotics; yet the question of psychological addiction became a quite difficult one in the literature. It would not be an exaggeration to say that ayahuasca is becoming the "LSD of the 21th century" and it also has the significant but certainly idiosyncratic ceremonial context that was so important for Huxley. However, due to cultural and psychological complications it has several drawbacks occasionally. In a more general context, self-actualization is not the direct result of transpersonal-spiritual experiences; they also can be a tool to suppress urgent existential matters. In connection with self-deception, Trichter coined the term "spiritual addiction": "This ceremony-craving behavior is the result of a co-dependence on the ayahuasca rituals and its components, which is a form of what could be called spiritual addiction. It is a way in which the person uses an external object as a soothing coping mechanism. This will likely fail repeatedly as the patient will become psychologically dependent on the ayahuasca to achieve these visions, feelings, and insights." (Trichter, 2010, 139) If we characterize self-enhancement by strengthening the ego and autonomy, then, with respect to ceremony-dependency, we could also say that progression is not systematically followed by regression. Moro and his colleagues highlight the fact that "spirituality" is a very diffuse and ambiguous term with individual interpretations, but according to comparative studies the context of drug usage can facilitate the chance to experience altered states as a religious revelation or "spiritual awakening". To put it in a more mundane parlance, as mentioned in the previous chapters, the conceptual and ideological background is remarkably important in the genesis and interpretation of the experiences (Moro et al., 2011, 190). Krippner and Sulla, after a survey on several definitions of spirituality, differentiate religious counselling from spiritual psychotherapy. The former is a structured form of rituals and proscriptions, the latter, by contrast, means a free and malleable practice to seek and integrate self-transcendent traits like compassion and unconditional love (Krippner and Sulla, 2000, 74). Naturally, psychedelic therapies owning to their awe-inspiring or horrifying experiences can be regarded as spiritual therapies.

The relevance of Jung's psychology to psychedelic experience has been shown by many authors including Leary, Metzner, Alpert, and Hill. In their book, Leary and colleagues referred to Jung as a "psychiatrist cum mystic" who explored the world of "inner visions" and committed himself to the study of "wisdom and superior reality of internal perceptions" (Leary et al., 2007, 13). As Jung wrote, "the conscious standpoint

arbitrarily decides against the unconscious, since anything coming from inside suffers from the prejudice of being regarded as inferior or somehow wrong" (Jung, 1969c, 489). Although Jung did not use psychedelic drugs in psychotherapy, his explanation of the psychedelic experience resonates with that of Huxley's and Grof's (Hill, 2013, 8). Grof emphasized that psychedelic substances do not *generate* psychological effects, but mobilize specific psychological processes that allow the conscious mind to access otherwise inaccessible unconscious contents. Thus one's psychedelic experience is vastly depending *on the person* and *not the substance* used (Grof, 2001, 32). Huxley – on the grounds of Henri Bergson's model of perception – hypothesized that psychedelics can manipulate the "reducing valves" of the brain so normally and biologically useless and valueless information can penetrate the threshold of awareness bringing forth the state of "Mind at Large" (Huxley, 1963, 26). These substance-induced altered states are reminiscent of those provoked by certain spiritual techniques (e.g. yoga, meditation, fasting), severe emotional shock, etc. In good agreement with these, recalling her and others clinical findings in Jungian psychoanalysis, Connolly writes that ASCs may give access to unconscious contents by "lowering" the threshold of consciousness:

> "…consciousness of the ego complex is substantive but, in non-categorial states such as regression, the ego representation becomes destabilized. Here, there is a return to earlier levels of categorial differentiation and integration of mental representations in which the boundaries between the representations of self and other, self and world are gradually broken down. (…) As Taylor noted in 1984, such transitive states may play a fundamental role in the anomalous states of consciousness which occur in higher states of consciousness such as those experienced in transcendental meditation and other Eastern techniques." (Connolly, 2015, 168-169)

As Hill points out, Jung in his commentaries on *The Tibetan Book of The Great Liberation* raised the possibility that understanding psychedelic experiences might have an important theoretical value in designing novel psychotherapies (Hill, 2013, pp. 13 and 173-176). However, Jung also warned against the possible negative outcomes of the "irresponsible experimenting" with psychedelics. In a letter to Alfred Hubbard, one of his contemporary advocates of psychedelic therapy, he writes:

> "When it comes to the practical and more or less general application of mescaline, I have certain doubts and hesitations…/…The analytical method of psychotherapy (e.g., 'active imagination') yields very similar results, viz. full realization of complexes and numinous dreams and visions. These phenomena occur at their proper time and place in the course of the treatment. Mescaline, however, uncovers such psychic facts at any time and place when and where it is by no means certain that the individual is mature enough to integrate them." (Jung, 1975a, 222)

He also adds in a meaningful manner:

> "It would be a highly interesting though equally disagreeable experience." (Jung, 1975a, 224)

At that time, the contemporary view on the use of psychedelic drugs was controversial denoting these substances as "psychomimetics/psychotomimetics" or "psychodysleptics" that is agents that cause psychosis or hallucinations (Shepherd, 1981, pp. 31 and 92; please also see the relevant parts in *chapter 3.1*). As the renegade group of Harvard psychologists claimed in the middle of the 1960s:

> "Westerners do not accept the existence of conscious processes for which they have no operational term. The attitude which is prevalent is: - if you can't label it, and if it is beyond current notions of space-time and personality, then it is not open for investigation. Thus we see the ego-loss experience confused with schizophrenia. Thus we see present-day psychiatrists solemnly pronouncing the psychedelic keys as psychosis-producing and dangerous." (Leary et al., 2007, 19).

It is worth to mention that – maybe not surprisingly – even the proponents of the psychotomimetic paradigm admitted that the profound alterations in mental states caused by psychedelic substances might provide valuable insights into various psychopathologies or even fundamental psychic functioning (Hill, 2013, 91).

Contemporary studies are well aware of the fact that the overvaluation of psychedelics could be harmful individually as well as socially, and successfully avoid the overzealous tendencies of the counterculture as in the 1960s. Recent studies could

demonstrate that using psychedelics *instrumentally* might enhance self-awareness (Moro et al., 2011) and can be characterized as an "auto-gnostic" (Winkler and Csemy, 2014) or "cognitive tool" (Blainey, 2014) by means of generating a visionary or "virtual reality" (Shanon, 2010). In appropriate – psychotherapeutic or ritual – circumstances psychedelics prone to enhance the ability to become more self-aware of one's destructive thoughts and emotional-behavioral patterns. Moreover, as Blainey argues, this reflective attitude virtually strengthens the subject's existential intelligence by diminishing psychological blocks (Blainey, 2014). In the biomedical context, brain studies on psilocybin shows that the default mode network is highly modulated after psilocybin administration which may be the neural correlate of the typical ego-dissolution experience in psychedelic trips. In addition, the increased hyppocampal activity and desynchrony in higher cortical areas seem to verify the "mind-revealing" aspect of the experience. The increased interspheric correlations could be the neurodynamical basis of divergent thinking – the *integration process*, if there is any – under and after psychedelic experiences (Tagliazucchi et al., 2014, 13).

Overall, these and other clinical findings – including those demonstrating the neuroprotective and neuroplasticity-enhancing properties of various psychedelic substances (Roseman et al., 2014; Szabo and Frecska, 2016; Vollenweider and Kometer, 2010) – are in the focus of recent biomedical and clinical psychological research. These early and novel findings considered to be very important by many renowned experts in the fields of natural and life sciences, medicine, psychology, as well as philosophy and social sciences. Naturally, the value of contemporary interdisciplinary research germane to psychedelic states and its potential therapeutic implications manifests via not only in the form of expanding our knowledge about the human mind in non-conventional situations, but also in initiating a truly extensive-integrative dialogue that conjoins the seemingly unrelated areas of academia.

4.2 Psychosomatics and psychedelic states: a post-Jungian framework for psychosomatic therapy

4.2.1 The Jungian idea of synchronicity: mind-body relations and altered conscious states

A crucial element of my thesis is Jung's reconsideration of the mind-body problem through the establishment of the idea of *synchronicity* and its later interpretations by his followers and critics. Synchronicity was termed as "an acausal connecting principle" and "meaningful coincidence" by Jung and has been a controversial and exciting hypothesis ever since its first publication in 1952.[76] In this work, Jung's primary aim was to expand the conception of psyche and nature in Western thought (Jung, 1973a). In his preceding years – harnessing an enormous body of clinical experience and scientific, religious, and philosophical studies –, Jung discovered a "science of the sacred" focusing on the deep and perennial patterns of *physis*, in the human culture and psyche, what he eventually called "archetypes". He constantly struggled with the means he could fit his theory into the dominant scientific paradigm of the twentieth century; his friend and consultant in this project was the Nobel laureate physicist Wolfgang Pauli who finally became his co-author in *"The Interpretation of Nature and the Psyche"* published also in 1952 (Cambray, 2012, 2). Quantum theory, field theory, and relativity were all critical ingredients in the creation of the concept of synchronicity. Not surprisingly, Jung's other major correspondent was Albert Einstein, a frequent visitor and dinner guest in Jung's home, especially in the period when Einstein was working on the elaboration of the Special and the General theories of relativity (McGuire, 1974, 171). As Jung recalled:

> „It was Einstein who first started me off thinking about a possible relativity of time as well as space, and their psychic conditionality. More than thirty years later this

[76] Jung explicitly used the term „synchronicity" for the first time in 1929 when giving a seminar later published in *Dream Analysis*: "They took up the symbolism as if they had been here with us. Since I have seen many other examples of the same kind in which people not concerned were affected, I have invented the word synchronicity as a term to cover these phenomena, that is, things happening at the same moment as an expression of the same time content." – Cambray quotes Jung (Cambray, 2012, 8)

> stimulus led to my relation with the physicist Professor W. Pauli and to my thesis of *psychic* synchronicity." (Jung, 1975b)

As Cambray points out, Jung's psychic relativism was put into context with the underlying affect in association with the archetypal energies;[77] he says: "Jung is seeking to create a theory of the world based on the psychoid archetype as an originary point from which the subjective and objective realms emanate." (Cambray, 2012, 16)

Jung included four main elements in his theory: acausal connection, meaningful coincidence, numinosity, and the psychoid archetype. This latter concept was included in the final elaboration of his work. In his later years, Jung revised his theory by significantly broadening the conceptual spectrum of archetypes to a continuum of psycho-physical patterns of the human mind and culture which exist both in the psyche and the physical universe. In this dual nature of the archetype (physical and psychic), the physical aspect was referred to as the *psychoid* by Jung. To give an example, he drew an analogy between the light (as a physical phenomenon on the electromagnetic spectrum) and the psyche:

> "Just as the 'psychic infra-red,' the biological instinctual psyche, gradually passes over into the physiology of the organism and thus merges with its chemical and physical conditions, so the 'psychic ultra-violet,' the archetype, describes a field which exhibits none of the peculiarities of the physiological and yet, in the last analysis, can no longer be regarded as psychic, although it manifests itself psychically." (Jung, 1970, 187)

He frequently referred to the role and nature of archetypes as controllers of the psychic behavior of living organism as well as inorganic matter, thus was conceived the psychoid archetype as a *bridge between matter and mind*. Jung created the term "unus mundus" to describe this all-embracing, unitary reality that forms the very fundament of all phenomena (both psychic and material) in the universe.[78] To many Jungians and

[77] "Meaningful coincidences – which are to be distinguished from meaningless chance groupings – therefore seem to rest on an archetypal foundation. At least all the cases in my experience – and there is a large number of them – show this characteristic. (…) Affectivity, however, rests to a large extent on the instincts, whose formal aspect is the archetype." (Jung, 1973a, 24)

[78] Originally, it was the concept of the psychoid that impressed Pauli. Drawing upon Jung's idea, Pauli believed that the psychoid was the primordial link between physical events and the

post-Jungians, Lacan's concept of the *Real* is often regarded as to be comparable with Jung's psychoid unconscious, in as much as it might be perceived as true/truth yet enshrouded by vagueness (cannot be directly known). As Lacan postulated, the unconscious is the resultant of a complex and convoluted network of "metaphoric associations". This network can only be evinced and studied by the analysis of unconscious contents: psychosomatic symptoms, dreams, cases of parapraxis, etc. (Samuels, 1986, 40-41)

In formulating his views, Jung refers to Schopenhauer as the "godfather" of his conceptualization and thoughts about synchronicity:

> "Here I should like to draw attention to a treatise of Schopenhauer's, 'On the Apparent Design in the Fate of the Individual', which originally stood godfather to the views I am now developing. It deals with the 'simultaneity of the causally unconnected', which we call 'chance'." (Jung, 1973a, 11)

He directly refers to a metaphor, used by Schopenhauer, when describing a possible cross-linking of necessity and chance:

> "Schopenhauer illustrates this simultaneity by a geographical analogy, where the parallels represent the cross-connection between the meridians, which are thought of as causal chains. All the events in a man's life would accordingly stand in two fundamentally different kinds of connection: firstly, in the objective, causal connection of the natural process; secondly, in a subjective connection which exists only in relation to the individual who experiences it, and which is thus as subjective as his own dreams. … That both kinds of connection exist simultaneously, and the selfsame event, although a link in two totally different chains, nevertheless falls into place in both, so that the fate of one individual invariably fits the fate of the other, and each is the hero of his own drama while simultaneously figuring in a drama foreign to him – this is something that surpasses our powers of comprehension, and can only be conceived as possible by virtue of the most wonderful pre-established harmony." (Jung, *ibid*)

---

psyche of the scientist who examined them. Thus, for them (i.e. both Pauli and Jung), the archetypes that governed and underlied our ideas and perceptions were eventually seemed to be governed by an objective order that transcended both the human psyche and the physical universe.

The model exposed here is based on Leibniz's *pre-established harmony* as it has already been shown in *chapter 2.2*. Jung was fascinated by the idea of the Leibnizian harmonia praestabilita and he turned to the *Monadology* when further refining his thoughts on synchronicity. Focusing on the monads[79], Jung extends Leibniz's psychosomatic parallelism to a universal principle by adding:

> "It is clear from these quotations that besides the causal connection Leibniz postulates a complete pre-established parallelism of events both inside and outside the monad. The synchronicity principle thus becomes the absolute rule in all cases where an inner event occurs simultaneously with an outside one." (Jung, 1973a, 84)

And he then shortly remarks in a footnote (n. 70.):

> "I must again stress the possibility that the relation between body and soul may yet be understood as a synchronistic one. Should this conjecture ever be proved, my present view that synchronicity is a relatively rare phenomenon would have to be corrected." (Jung, *ibid*)

Jung was especially concerned with the philosophical relation of psychophysical parallelism and synchronicity. His approach and presentation of the topic, at that time, received mixed feelings within the circles of scientist, psychologists, philosophers, and other experts. Especially because he found that synchronistic phenomena were usually associated with what he called an "absolute knowledge", "knowledge not mediated by the sense organs", and he claimed this was factual in supporting "the hypothesis of a self-subsistent meaning, or even expresses its existence" (Jung, 1973a, 90). He saw this as a "meaningful orderedness", a "causeless order", a principle that is underlain by archetypal processes. When discussing about this topic, Jung often refers to perplexing medical studies about paranormal phenomena, such as "deep syncopes resulting from acute brain injuries", "out-of-body experiences", or "ESP" (extrasensory perception), where "sense perceptions are impossible from the start, it can hardly be a question of anything but synchronicity" (Jung, 1973a, 94). Current neuroscientific researches still

[79] Each monad is an „… 'active indivisible mirror.' Not only is man a microcosm enclosing the whole in himself, but every entelechy or monad is in effect such a microcosm. Each 'simple substance' has connections 'which express all the others'. It is 'a perpetual living mirror of the universe'." Jung quotes Leibniz (*in* Jung, 1973a, 83)

struggle with the formulation of theories that could successfully address such experiences (Parnia and Fenwick, 2002). According to his critics, another major problematic aspect of his approach was that the theory of synchronicity, as an *acausal connecting principle*, stood clearly against the dominant, mechanistic thought of modern science which is based on – or might we say incorporates – *causality* and *induction* with its deep roots in Humean epistemology. Since in relativistic physics space and time form a single continuum, Jung (through his conversations with Einstein and Pauli) emphasized the psychoid aspect of the theory of archetypes in order to circumvent this dilemma, and to *link synchronicity with causality*:

> "Archetypal equivalences[80] are *contingent* to causal determination, that is to say there exist between them and the causal processes no relations that conform to law. They seem, therefore, to represent a special instance of randomness or chance, or of that 'random state' which 'runs through time in a way that fully conforms to law', as Andreas Speiser says.[81] It is an initial state which is 'not governed by mechanistic law' but is the precondition of law, the chance substrate on which law is based. If we consider synchronicity or the archetypes as the contingent, then the later takes on the specific aspect of a modality that has the functional significance of a world-constituting factor. The archetype represents *psychic probability*…/…It is a special psychic instance of probability in general, which 'is made up of the laws of chance and lays down rules for nature just as the laws of mechanics do'.[82] We must agree with Speiser that although in the realm of pure intellect the contingent is 'a formless substance', it reveals itself to psychic introspection – so far as inward perception can grasp it at all – as an image, or rather a type which underlies not only the psychic equivalences but, remarkably enough, the psychophysical equivalences too." (Jung, 1973a, 99; *italics original*)

In Jung, the archetypes of the collective unconscious are, by essence, empty forms which engender the ontological subsoil – and manifest the creative, productive processes – of psychic life. As mentioned above (and in *Part Two*), they form an intricate web in which each archetype possesses numinous potential. They are of particular importance for our discussion about psychosomatics since, when *constellated*,

[80] *i.e.* (inner) psychic and (outer) physical processes
[81] Jung cites Speiser: *Über die Freiheit*, Basel, 1950, 4f.
[82] *ibid*, p. 6.

they are able to emerge as *archetypal images*. They are considered as virtually psychosomatic entities that bridge body and mind. Thus, Jung's main goal was to create a holistic view of the psychic-physical aspects of universe merging his theory of synchronicity with modern physics and philosophy:

> "…prior to the collaboration, Jung had stressed mainly the phenomenological and empirical features of synchronistic phenomena, while in collaboration with Pauli, he focused his attention upon their ontological, archetypal character…. in fact, as a consequence of their collaboration, synchronicity was transformed from an empirical concept to a fundamental explanatory-interpretative principle which together with causality could possibly lead to a more complete world view." (Donati, 2004, 707)

With regards to altered states of consciousness, synchronicity will be an important ingredient in formulating my thesis about psychosomatics. For a further elaboration of the psychoanalytic-phenomenological context in which this approach will be placed, I will use the "quasi-Jungian" concepts of Wilhelm Reich about body and psyche. The latter is discussed in the following chapter.

4.2.2 Reich on mind and body, orgone, and psychosomatics

When giving his famous seminar on Nietzsche between 1934 and 1939, Jung presented his novel concept on the *subtle body* that is the *idea of the somatic unconscious* which can be grasped as a "primordial body" out of space and time:

> "…in dealing with Nietzsche's concept of the self, one has to include a body, so one must include not only the shadow – the psychological unconscious – but also the physiological unconscious which is the subtle body. You see, somewhere our unconscious becomes material, because the body is the living unit, and our conscious and our unconscious are embedded in it: they contact the body. Somewhere there is a place where the two ends meet and become interlocked." (Jung, 1988, 441)

This is a direct allusion to the *psychoid aspect* of the body as well as a clear enunciation of Jung's idea of embodiment which is comparable with the embodied mind theory as raised and conceived by Merleau-Ponty and others (please also see *Part One*). The analogy is further nuanced if we consider Jung's description about this "embeddedness" that implies the unity of all physical and mental aspects in the formulation of human experience (Tresan, 2004). Possessing a similar background – also trained in Freud's psychoanalytic school – Wilhelm Reich's notions on the human mind and body echoes many aspects of Jung's. There are many differences as well as similarities in their approaches to the topic, nevertheless, Reich shared the views of Jung on psychophysical parallelism when discussing about embodied existence. He emphasized the functional *unity of mind and body*:

> "Yet, the processes in the organism demonstrated that *the quality of a psychic attitude is dependent upon the amount of the somatic excitation from which it is derived*. In a condition of strong somatic tension, the idea of sexual pleasure and sexual intercourse is intense, vivid, graphic. After gratification, this idea can be reproduced only with difficulty. I formed an image of this as an ocean wave which, by its rising and falling, influences the movement of a piece of wood on the surface. It was nothing more than a vague clue that the psyche arises from or sinks into the deep biophysiological process, depending upon the state of the latter. It seemed to me that the appearance and disappearance of consciousness in the act of waking and going to sleep were expressive of this wave process. It was vague, elusive. It was merely clear that biological energy governs the psychic as well as the somatic. A *functional unity* prevails." (Reich, 1973a, 265)

Reich denoted Bergson as the source of his psychophysical theory in his best known book, *"Function of the Orgasm"*, published in 1927:

> "I had more success with Bergson. I made an exceedingly careful study of his *Matter and Memory*, *Time and Freedom*, and *Creative Evolution*. Instinctively, I sensed the correctness of his efforts to refute mechanistic materialism as well as finalism. Bergson's elucidation of the perception of time duration in psychic experience and of the unity of the ego confirmed my own inner perceptions of the nonmechanistic nature of the organism. All of this was very obscure and vague – more feeling than

> knowledge. My present theory of the identity and unity of psychophysical functioning originated in Bergsonian thinking, and has become a new theory of the functional relationship between body and mind." (Reich, 1973a, 23-24)

Both Jung and Reich rooted his theory in the very foundation of *life itself*, down below, at the level where cultural, individual, or temporal differences are no longer important, valid, explainable or interpretable. While Jung's creed was primarily fountained from his experience of the archetypes and the collective unconscious, Reich, driven by his passion and obsession towards the study of science and nature, followed the way of the organic body, the eternal dance of the living-breathing-pulsating matter which he saw as the ultimate manifestation of the cosmic *orgone ocean*.[83] Orgone, the all-pervasive energy, one of the key concepts in Reich's system, has also been paralleled with the Jungian *unus mundus* (Conger, 2005, 147-160). It was originally conceived on the grounds of the Freudian concept of *libido*. While Freud identified the libido with a sort of primeval, sexual drive submerged into the abyss of the unconscious, for Reich, libido was an essentially life-affirming energy that was victimized and directly repressed by society and moral conventions.[84] His *bioenergetic* views of the libido led to the psycho-physiological conception of the orgone and, later, the expansion of his theory about the nature of neuroses: in his system, neurosis was the actual somatic manifestation of psychic inhibitions, repressions, tensions and traumas, which all contributed to the genesis of what he called "the body armor". Thus mental events were ultimately canalized into the physical body in the form of a kind of *psychophysical transmutation*… as they have never been truly separated (Smith, 2000). Reich's therapeutic approach – the so-called "vegetotherapy" – was based on these principles

[83] Orgone energy is considered as the *universal life force* in Reich's system. As later developed by Charles Kelley (Reich's student), it was hypothesized as the *anti-antropic principle* of the cosmos. It is frequently analogized by Mesmer's *animal magnetism* and Bergson's *élan vital*. Orgone was conceived as an omnipresent substratum in nature, similarly to the *aether* (ether, luminiferous aether, etc.) concept of the 19th century, however, it was associated with boundless living energy rather than inert matter. According to orgone theory, it can coalesce to give rise to organization on all scales, from microscopic units („bions") to macroscopic life forms, clouds, planets, even nebulae or galaxies.

[84] Reich, through his psychoanalytic practice, proposed the idea that the state (with its versatile toolkit, such as political forces) actually exert control on the citizens' unconscious responses as a „parental authority". His views concerning the nature of libido was resulting in his continuous confrontation with the members of the Institute of Psychoanalysis, eventually leading to his official expulsion from the organization in 1934 (Reich Rubin, 2003). Similarly, due to his political stance and highly antagonistic attitude towards the increasing fascist trend in politics he was forced to leave Germany after Hitler came to power (Reich, 1970).

and aimed to release and deconstruct this body armor so the primordial instinctive reflexes could be freed and take control. Reich's understanding of the orgone and its role in psychosomatic healing was quite a departure from the original, mainstream medicine and Freudian psychoanalysis. Vegetotherapy, by the *orgastic release*[85] of repressed psychic energies, stands very close to modern psychedelic therapies (and transpersonal approaches) as it also involves the classic "oceanic" state of mind subsequent to the *decomposition of the ego*. As Stanislav Grof says:

> "In many ways, Reich teetered on the edge of transpersonal understanding. He was obviously close to cosmic awareness, which found its expression in his speculations about the orgone. True religion for him was unarmored oceanic merging with the dynamics of the universal orgone energy." (Grof, 1985, 170)

The aforementioned similarities offer us a way to synthesize Jung's and Reich's approaches concerning psychosomatics. For Jung, the formation of symbols "is frequently associated with physical disorders of a psychic origin, which in some cases are felt as decidedly 'real'" (Jung, 1980, 173); he also adds:

> "The symbols of the self arise in the depths of the body, and they express its materiality every bit as much as the structure of the perceiving consciousness. The symbol is thus a living body, *corpus et anima*." (Jung, *ibid*)

Similarly to Reich, Jung believed that the sympathetic nervous system of the body represents a possible locus of mind-body interaction. For Jung it represents an entry point, a portal through which one may step into the deeper collective unconscious (Conger, 2005, 186). This is, of course, not a place of direct interaction *per se* rather a point of *gradual transition* where *body and psyche are experientially intermingled*:

---

[85] „Erective and ejaculative potency are nothing but indispensable prerequisites for *orgastic potency*. Orgastic potency is the *capacity for surrender to the flow of biological energy without any inhibition,* the *capacity for complete discharge of all dammed-up sexual excitation* through *involuntary pleasurable contractions of the body*. Not a single neurotic individual possesses orgastic potency; the corollary of this fact is the fact that the vast majority of humans suffer from a character-neurosis." (Reich, 1973a, 79; *italics original*)
As Conger writes: „The natural uninterrupted streaming of the body's energy Reich called the orgasm reflex, which became the biological goal of vegetotherapy and the basis for dissolving neurotic conflict." (Conger, 2005, 45)

> "The deeper 'layers' of the psyche lose their individual uniqueness as they retreat farther into darkness. 'Lower down', that is to say as they approach the autonomous functional systems, they become increasingly collective until they are universalized and extinguished in the body's materiality, i.e. in chemical substances. The body's carbon is simply carbon. Hence 'at bottom' the psyche is simply 'world'." (Jung, 1980, 166)

Both Jung and Reich felt intuitively that the sympathetic nervous system plays a significant role in the somatization process as it is very receptive of psychic/affective alterations of individual life. While Reich saw the *libido and genitality* as the critical mediators of such psycho-physical processes, for Jung it was the *psyche's ability to symbolize* that directly intervened with the synchronistic relation of mind and body. Based on the chapters of *Part Two*, it is tempting to speculate here that altered states of consciousness may allow one to gain access to unconscious processes linked to the physiology of the body by conducting archetypal energies into the conscious mind as direct manifestations of "bodily symbols". If we take the Jungian *unus mundus* and the Reichian *orgone ocean* as comparable terms in a synthetic analytical psychological framework, ASCs may provide us with a gateway into the experiential dimensions of these "spheres" and allow the body to "recalibrate" its biological/physiological composition to a natural state of equilibrium where it can heal itself through intrinsic mechanisms. So far we have seen that this may be possible by dipping into the bioenergetic waters of the orgone ocean as Reich suggested. But how can we mobilize self-healing mechanisms from the deeper realms of our unconscious? The Jungian answer to this question is epitomized in the psychology of complexes.

4.2.3 Altered states of consciousness and Jung's theory about the complexes

In this chapter I will hypothesize that, in a proper setting, altered conscious states – including both chemically and non-chemically induced ones – have the capability to mobilize and surface unconscious contents which may then be actively integrated and "used" in psychosomatic-based therapies. As mentioned above, in the Jungian framework, *spiritual experience* is a numinous (emotionally toned) experience that reorganizes the ego-Self axis leading to the possibility of a two-way

communication between the ego-consciousness and the Self/Selbst. It has recently become a highly discussed topic whether numinous/spiritual experiences were rooted in the same ground as the naturally occurring and drug- or artificially-induced altered states. Roger Walsh shed light to the fact that a single spiritual experience is not enough for a profound change in habits. Walsh considers that one has to be prepared to be able to integrate a profound spiritual experience:

> "Both psychological and social factors may be involved. The psychedelic user may have a dramatic experience, perhaps the most dramatic of his or her entire life. However, a single experience, no matter how powerful, may be insufficient to permanently overcome mental and neural habits conditioned for decades to mundane modes of functioning. The contemplative, on the other hand, may spend decades deliberately working to retrain habits along more spiritual lines. Thus, when the breakthrough finally occurs, it visits a mind already prepared for it." (Walsh 2003, 4)

In this respect, artificially induced or spontaneously engendered ASCs require the "safe house" of a relatively strong ego that has affinity to became permeable for intruding uncanny experiences of psychedelic states but it can preserve the function of reflexive consciousness for the sake of the subsequent integration-process.

I argue that altered states could catalyze therapeutic processes or could alleviate the psychosomatic symptoms of "negative therapeutic reactions", in which – contrary to all efforts – therapy yields the exacerbation of the symptoms. Careful cultivation of altered conscious states, and especially psychedelic states, could lead the patient to the basic level of self-soothing (including homeostatic and other self-regulating physiological processes). This healing process may be eventuated by the so called *placebo-response complex*[86] in conventional interpersonal therapeutic settings, and the psychedelic journey may represent a more radical and possibly faster method to the hidden core of the personality – the Self, which could also be the source of intrapersonal well-being. Naturally, as we have seen above, the psychedelic experience (or any kind of spiritual experience) should also be interpreted in a therapeutic setting in order to cope with and integrate its multifaceted – and frequently disturbing – symbolic content into the ego-complex. There could be several ways to instigate the ego-Selbst dialogue:

[86] Discussed later in this chapter.

1) In normal therapeutic settings the therapist as a "good mother" drives back the patient to the state of basic trust and harmony that dwells in her/his unconscious procedural memory. Thus, via the difficult dynamics of transference and counter-transference, the placebo-response complex emerges in the form of the emotion or mood of well-being. This pre-symbolic state is developed in the infant-caregiver relation in normal circumstances of affect-regulation; 2) in case of psychedelic-enhanced psychotherapy the autocatalytic self-healing and self-transcending processes are more lively and animated and frequently lead to psychosomatic healing effects similarly to a therapeutic catharsis and reassured interpersonal stability. In order to clarify my thesis and emphasize the psychosomatic aspect of symbolization (i.e. affect-transformation) in a more detailed manner I have to give a short introduction into contemporary post-Jungian psychosomatics.

According to historical interpretations psychosomatics has an interesting multi-faced characteristic. Ramos suggested six models for the proper interpretation of the psychosomatic phenomenon (Ramos, 2004, 7-27). 1) In the *primitive model*, a disease is very often appears as a form of punishment from the hands of supernatural forces (gods of Nature). It is resonating with the notions of Jung and Levy-Bruhl demonstrating that the primitive psyche naturally merges the object and subject into a holistic unity, including Nature, God, matter, body, life, etc.[87] Nevertheless, Jung was quite not popular among his anthropologist contemporaries since he uncritically applied Levy-Bruhl's term to describe the aboriginals' animism. By this he unwittingly portrayed a western naivety about the far more differentiated world of the aboriginals (Shamdasani, 2003, 328-338). Apart from the theoretical questions it is evident that in animistic worldviews the shaman plays an important role to help the communication between the patient and the supernatural entity or entities (God/gods).

> "The shaman, as a mediator, had, therefore, the function of contacting spiritual forces. A cure was never attributed to him. His status was earned through his ability to precipitate 'ecstasy'. He would listen to the patient's history not in search of a symptom, but rather to discover what the patient's error had been. The disease was invariably the outcome of violating a taboo or offense to the gods. A cure lay in re-establishing the link of the human with the divine through repentance and sacrifice." (Ramos, 2004, 8)

[87] It was originally described as the *„participation mistique"* by Jung. See: Jung 1971, p 781.

Secondly, 2) in the *Greek model*, a disease is understood as a form of disharmony. They used several methods (e.g. music, spells, diet, dream interpretation) to expel the *daimon(s)*, which caused the ailment. In this case, the doctors called for the power of the *Nous* (God, the Creator) to restore the internal harmony, which then led to the stability of the union between psyche and the soma (Ramos, 2004, 10). As the third approach, 3) the *Cartesian model* delineates, there is an interaction between the affective and perceptive states of the psyche and the body, respectively (as outlined above in *Part One*). 4) The *romantic model* involves a very intimate relationship between the doctor and the patient. In the nineteenth century, psychological factors became very important in the aetiology of diseases, as W. Osler, an English doctor said: "In the medicine of the future, interdependence of mind and of body is to be more fully recognized and the form whereby one may influence the other is hardly possible to imagine at the present time." The contemporary models of psychosomatic disease, 5) *the biomedical* and 6) *the holistic approaches*,[88] are focusing on the *essential unity* of the soul and body, and therefore, both can be considered as philosophical reductionism (Ramos 2004, 15-27). Thus, in modern times, it seems that there is no way out of the ontological monism of the body. Contemporary technologies, such as functional magnetic resonance imaging (fMRI) allow scientists to "observe" the inner activities of the brain and body. Unfortunately, neurotopological data obtained this way tell almost nothing about the *quality* of thoughts and mental experiences in general. Psychosomatics also pose a current epistemological challenge, since it cannot provide evidence for mind/body interactions. The current biomedical models focus on the role of the soma in psychosomatic diseases and insist that an exclusively physical aetiology stands behind the phenomenon, reflecting the "deeply held belief that an ethereal mind cannot actually injure a material body" (Kradin, 2011, 40). So far, science has failed to show how a single thought is generated in the human brain, it is therefore not so surprising that experts have been unable to reveal any of the vastly complex processes underlying mind/body interactions. A possible way out of the darkness could be Jung's explanation of the *complexes*.

[88] Briefly, the *biomedical model* represents today's medicine based on empirical, evidence-based data. Here, the *holistic approach* emphasizes the interdependence of mind-body interactions where, though mind and body have different essences, they are but different *aspects* of the same and only principle of the Universe.

At the very beginning of psychology as an independent discipline, early thinkers, such as Charcot and Janet observed that multiple centres of organization exist within the psyche. These centres were originally identified as secondary personalities, which can emerge and replace the primary personality in altered states of consciousness. Initially, they were thought to be *daimonic*, essentially dangerous and destructive sub-personalities originated in traumas and repressed in the unconscious (Hill, 2013, 66; Kalsched, 1996, 68). Early therapists hypothesized that these entities had their origin in the brain (e.g. lesions), and Freud suggested that their "summoning" by means of hypnosis and the act of "exorcism" might have therapeutic potential. However, working with his hysterical patients, Freud soon recognized that these entities were actually of *psychic* origin. This led to his hypothesis "…that memories of the trauma became cut off from consciousness in what he called a 'second psychical group' or a 'sub-conscious complex of ideas', which resisted healing." (Freud, 2015; Hill, 2013, 66; Kalsched, 1996, 69-70). Later, based on these observations and on his own word association studies, Jung came to understand that the patients' associations were actually blocked by certain affective psychic patterns (Jung, 1919, 297-321). This resulted in the creation of his theory of psychic dissociation and *feeling-toned complexes*.

In Jungian psychology, complexes are multi-layered structures consisting of associated ideas around a psychic core. These usually possess significant energetic values automatically attracting ideas towards the core. Complexes can be both conscious and unconscious; in the latter case they may behave as separate personalities with completely uncontrollable idea- and affective dynamism (Fordham, 1966, 22-23). Jung discovered that psychic, affect-toned images were linked to bodily sensations. Moreover, after his own inner turmoil – and following Stanley Hall – he developed *active imagination*, a technique of affect-transformation by means of conjuring up and following the way of powerful hypnagogic images. Meanwhile, he recognized that the *body* is a more efficient tool of enactment (i.e. releasing energy) than imagination (Chodorow, 1997, p 8). The release of affects bound by complexes may result in a marked reduction in somatic symptoms (Kradin, 2011, 42). It appears to be *very close to the kind of psychic-affective-somatic axial response what Reich found when working with his patients while laying down the foundation stones of his orgastic potency theory*, at least, the Jungian-psychic and the Reichian-somatic approach turn up as two sides of the same coin. This is particularly interesting and important in terms of therapeutic value. Another very exciting aspect of this psychosomatic dynamism has already been

reported. In a recent and genuine psychoanalytical approach, originally developed and termed as *embodied imagery* by Bosnak, patients are asked to focus on dream images and are encouraged to anchor the images back into the body (Bosnak, 2007). Thus, the complex works in a *bi-directional way and can therefore be approached either through the psychic image or the physical symptom*. In his early works, Jung hypothesized that symbols could have a capability to trigger psychosomatic responses (Jung, 1970). Furthermore, as Jacobi and Kradin pointed out, Jung defined the symbol as "a psychic transformer of energy that helps restore wholeness as well as health" (Kradin, 2004, 626-627; see also: Jacobi, 1959). The symbolic representations of the affects plays a central role in Jungian and psychedelic therapies as well. In his later works, Jung referred to the complex as an autonomic entity configured around an archetypal core. Thus a complex is:

> "…a collection of imaginings, which, in consequence of this autonomy, is relatively independent of the central control of the consciousness, and at any moment liable to bend or cross the intentions of the individual." (Jung, 1973b, 1352)

The core of the complexes are invisible; consciousness only aware of the constant flux of interchangeable archetypal images perpetuating around the actual, functional meaning of the archetype *per se*. Complexes are integrally related to the Self that is "the supraordinate archetype of the 'psychic centre' that organizes the individual's *symbolic representations of the psyche/soma*" (Kradin, 2004, 622; *italics added*).

For Jung, symptoms – whether they are associated with psychoses, neuroses, or their nature is psychic or somatic in origin – are grounded in the complexes. It is generally true furthermore that the more powerful and autonomous the complex, the more serious the symptoms. During his intense and thorough research Jung demonstrated that "the basis both of ego and of the secondary complex is the body, insofar as both have their emotional tone based on coenesthetic impressions, understood here as the totality of sensations that originate in the body organs, i.e. sensations through which the body itself is perceived" (Ramos, 2004, 31). It is quite not hard to see the clear parallels with the *phenomenal lived body* and *Jung's origin of the psychosomatic symptoms*. We could translate the previous passage to the jargon of phenomenology as the following: psychosomatic symptoms are *grounded in the experiential features of the lived body (Leib)* and are under the direct control of the

feeling-toned complexes. But then, how is the Jungian ego constituted? This and the previous chapters have already discussed the main features of the ego and its relation to the Self. However, this needs further elaboration in order to enable us to take a further step towards a synthetic embodiment-based psychoanalytic theory.

In his later work, Jung elucidates that the ego itself has actually two bases: 1) the Self archetype (*psychic foundation*), and 2) the other one is the *somatic foundation*, which has conscious and unconscious endosomatic sensational components (Jung, 1974, 3-7). Another important analogy between the Merleau-Pontian embodiment and Jungian approach to mind-body is that for Jung, ego-constitution is inevitably involves the "collision between the somatic factor and the environment" (Jung, 1974, 5), that is, the *life-world of the subject*. The personality is therefore includes both conscious and unconscious corporeal and psychic components as well as it is defined by its embeddedness in his/her environment:

> "Clearly, then, the *personality as a total phenomenon* does not coincide with the ego, that is, with the conscious personality, but forms an entity that has to be distinguished from the ego." (Jung, 1974, 5)

This observation was complemented with Fordham's findings when he – through his clinical work with children – realized that the ego was rooted in the Self, which expressed itself via *both archetypal images and bodily experiences* (Fordham, 1957). The body image – in the Jungian sense – involves all the conscious and unconscious bodily sensations, the body's sensational interaction with its environment (life-world in a wider context) and its subjective experiential consequences, and is part of the ego complex merging these all into an amalgam of a relatively stable structure known as the "individual". Following this line of thought, when a complex becomes activated, changes happen not only in the psyche and at the level of human behavior (as Jung's association experiments revealed), but transformations and alterations occur in the structure of the body as well. This kind of bodily *transformation* or *alteration* "may be felt as an indefinite sense of ill-being or may express itself in clearer symptoms" if psychic disturbances occur at the intra-individual (i.e. subjective) or supra-individual (i.e. intersubjective) level (Ramos, 2004, 31).

We could claim that the types of complexes are very diverse and virtually inexhaustible as they could certainly engender various negative or positive mind-body

states. One of the novel findings of post-Jungian psychology is the so-called *placebo response complex*. The placebo response complex, as suggested by Kradin, is a psychic entity that mediates placebo effects (hence the name) as well as is able to mobilize psychophysical pathways of well-being. Like other complexes, the placebo response complex is also highly context-dependent; it is activated by the dysphoria that drives the patient to seek symptom relief from care providers. This dyadic healer-patient attachment dynamics activates procedural memories of euphoric attachment states in early life. Kradin proposes that the original Jungian idea of complexes offers a model how the information – encoded during childhood attachment dynamics – can be actuated to modulate the dynamics of the Self, and to eventually heal the body: "The characteristic feeling-tone evoked by the *placebo response complex is a background affect-state of well-being* that is created during early infantile dyadic interactions with caregivers during brain development" (Kradin, 2004, 622). We have to add that the "background affect state of well-being" is the manifestation of the Self but not the Self *per se*. The Self can be conceived as the "template" or the "archetypal schema" of well-being; in this respect the Self not only *pre-symbolic* but also *pre-affective*! The ecstatic spiritual experiences in psychedelic states or overwhelming transference love in therapy could be manifestations of the Self which, by itself, is incomprehensible to the ego and ineffable for symbolic thinking. Kradin hypothesize that there is a "primary neural repertoire" that determines the individual background states of well-being (2004, 626); a very complex neurosignature and neuro-dynamics could be the correlation of the Self – if we, by all means, wish to search for neurobiological underpinnings. We can recognize here that the Reichian "uninhibited flow of energy" may be an analogy of the activation of the placebo response complex and its results, i.e. changes in the perceptual-experiential features of the lived body, and somatic healing. Epistemologically, "healing" has basically two meanings: 1) improvement or disappearance of disease symptoms at the *objective level* that is *changes in the body that can be examined by the third person observer*; 2) improvement or disappearance of disease symptoms at the *subjective level* that is *alterations in the Leib experience of the person*. Healing for me is always characterized by a significant experiential change of the lived body, even if the clay (der Körper) is not altered! And vice versa, even if my biological form was repaired thank to some sort of smart medical intervention (e.g. appendectomy), I cannot consider myself healed until my subjective experience of my own bodily self has regained its "baseline", "everyday suchness" of the Leib. This may

happen days, weeks, or even months after the surgical removal of the appendix when my Leib has gradually and finally been recalibrated and I feel myself again… Another illustrative example is when I take painkillers upon burning my finger; soon after taking the medication I feel better – like nothing happened – and go back to my daily routine, though my finger is far from its normal physiology. Thus, physical well-being is always determined by the subjective Leib experience which is, in turn, highly intertwined with the physiology of the body and the world it is embedded.

Taking psychedelics or getting engaged in Jungian psychoanalytic techniques (such as active imagination) may lead to the successful modification of the lived body so disease symptoms are alleviated or completely abolished. As has been shown above, there is a bi-directional communication between the level of psychic images/symbols and the physical symptoms, however, this is always happening *via the medium of the Leib* which appears to be a critical *hub* or *interface* in the intricate, manifold network of being. The Leib cannot be conceived as a *mere entity* but – according to Husserl, Merleau-Ponty, Gallagher, and others – should be seen as a resulting experiential aspect of the phenomenal field continuously procreated and maintained by our bodily actions in the life-world; yet we can consider the lived body as the very token of our subjectively experienced insertedness into the world. Based on these assumptions and on the summary of *Part Two*, I hypothesize that a healing process might be initiated by the manipulation of the Leib through altered states of consciousness when the expanded phenomenal field is capable of embracing repressed contents of the unconscious so the innate *transcendent function can carry out the process of psychointegration*. If this process fails to happen, psychosomatic disturbances (e.g. organic diseases) may arise. This hypothesis is consistent with earlier works presenting psychosomatic symptoms as *failures of the transcendent function* (Bovensiepen, 1993, 242-243; Sidoli, 1993). Psychointegration, on the other hand, is associated with the *activation of the placebo response complex* resulting in directly observable changes of the body, i.e. psychosomatic healing. I can only speculate about the means of body-mind communication during this process, however, as discussed earlier, synchronistic events may likely play a significant role in it. Such mysterious terms as the "orgone ocean" or "unus mundus" are referring to the singularistic nature of body-mind so theorizing about the ways of communication between the psyche and soma seems unprofitable within the context of our approach.

4.3 Leibanalysis: embodiment and analytical psychology in a general hypothesis of psychosomatics

As it has already been discussed in the previous chapters, human beings find themselves *embodied* in the world. This mode of existence has a unique *situatedness* in the life-world of the individual in as much as it involves the delicate and incredibly complex interactions of the body, self, and society. In order to be able to discuss about the body in psychosomatic medicine (including its philosophical and psychological implications), we need to take a short bypass on the field of medical anthropology. As Kirmayer (2003) shows, this discourse implies several different – nonetheless interacting – domains of the body: 1) most importantly the fact that we are *physical/biological beings* with a broad spectrum of environmental and social factors that are objective to our physiology; 2) the *phenomenological body* with its all sensory, affective, and subjective-experiential features; 3) the "material and political economic reality of bodies as objects and agents of power and value (the body politic)" (Kirmayer, 2003, 289; Lock, 1993). The quintessence of embodiment, as it appears in the works of Merleau-Ponty and his followers, is that all of these "bodies" are actually collaborate/interact as they were a single being so we merge and fall under the influence of our culture and social environment in our bodily structure and experience (Radley, 1984; Yardley, 1997). Many contemporary experts point out that these aspects are frequently conflated so bodies or even subsystems (e.g. the immune system) of the body are filled up, saturated by, or possess a *specific agency*. This would inevitably entail – both in the Merleau-Pontian and Foucauldian sense – that bodies by having their own subjectivity and power can overtake the self (Kirmayer, 2003; Lock, 1993). To my mind, for a successful outlining of the theoretical frame of our psychosomatic model we may not need to consider the importance of this problem as it appears at the level of the human immune system (its agency, subjectivity, and contribution to the perceptions of the phenomenal lived body). Since the proposed model here is basically synthetic and holistic, including the agency theory would pull the explanatory frame asunder.

I have briefly mentioned Blalock's and his colleagues' groundbreaking theory about the immune system as a sensory organ in *chapter 2.6.2* (Blalock et al, 1985; Blalock and Smith, 2007). This theory is based on empirical data that unveiled a communication pathway between the immune system and the brain/neuroendocrine system. This communication may allow the formation of an "immunological self" with

its own perceptual capacities as it has long been a dominant metaphor since Burnet. His 1941 monograph, *The Production of Antibodies*, is considered as a key publication in the history of immunology (Burnet, 1941; also see: Crist and Tauber, 2000). In this work, Burnet introduced the theory of "self" and "non-self" in immunology as a major principle of discrimination that stands between endogenous (host) and external motifs of recognition. He considered the "self" as being determined during embryogenesis and as being the very fundament of discrimination as opposed to any exogenous (environmental) stimuli that can interact with receptors of immune cells. Recent scientific theories view cognition not only within the context of neural networks but also as a complex phenomenon, which is based on interactions between neural and immune cells and other factors, such as the intestinal microbiota (Dinan et al., 2015; Szabo and Rajnavolgyi, 2013). Moreover, this interactionist approach to embodied cognition has also been extended to the reciprocal action of individuals with the social world. This aspect of *social embodiment of cognition* is a relatively new field in philosophy and cognitive neuroscience, and has not been considered in immunology to date (Henningsen and Kirmayer, 2000). However, this view points towards the direction of a *sociophysiology* of the immune system that merges ethnography, sociopsychological predispositions to certain illnesses, and many more fields. Here we need to address again the question of meaning and symbolization as being crucial in the psychosomatic translation of cultural-to-mental-to-physiological processes:

> "Cultural and biological processes are usually linked through processes of constructing meaning. But the term "meaning" covers a complex set of relational processes through which the cultural world is engaged by active cognizing agents. There are many ways to unpack the meanings of meaning and it is unclear which theories of semantics, semiotics, and pragmatics will best serve the development of sociophysiological theory." (Kirmayer, 2003, 294-295)

This "metaphor theory" could help us to understand the means of the physiological crystallization of interpersonal interactions and individual mental states, that is, *the process of somatization*. On the one hand, as Freud and Georg Groddeck suggested in the early 20s, illnesses usually possess a semantic component through which symptoms are expressed in the body, the "meaning of illness" that involves the widest sociocultural setting of the patient (Groddeck, 1977). On the other hand, Lyon (1990)

points out to the pivotal role of the emotive-affective component in the mediation of social-psychological-to-physiological processes. This may lead to novel concepts that fuse both social structures and the lived body. However, this vastly complex frame of interacting systems would exceed the limitations of this work, therefore, in the following we will focus on the process of *individual somatization*.

According to modern theories, psychosomatic diseases – classic examples in the literature include asthma, colitis, arthritis, various forms of allergies, neurodermatitis, etc. – are considered as somatic expressions of repressed/suppressed mental contents or unrecognized neurotic or psychotic symptoms (Wenzlaff and Wegner, 2000). Chronic psychological distress has also been associated with wound healing, regeneration, and disrupted modulation of immune responses: either excess functioning (such as chronic inflammations, allergies, autoimmune diseases) or immunosuppression (e.g. acute or recurrent infections, cancer, etc.) (see e.g. Capuron and Miller, 2011; Suarez et al., 2012; Walburn et al., 2009). At the beginning of psychoanalysis, hysteria was the typical disorder/diagnosis where patients were suffering from psychosomatic symptoms. It was the psychosomatic phenomenon that so impressed Freud calling his attention to the clinical cases of Charcot, and to Breuer's famous "talking cure" (Freud, 2004). Freud was a physician by training, and had a high regard for morphology and anatomy. Taking a decisive and influential step he recognized that "psyche had the capacity to disavow anatomic and physiological 'facts' in its production of the psychosomatic symptom. Indeed, it is in the nature of the psychosomatic symptom to defy logic, order, and form. For this reason, the psychosomaticist must be concerned *not with the anatomy of the body but with the elucidation of an 'imaginal' anatomy and its idiosyncratic and pathologized physiology*." (Kradin, 1997, 406; *italics added*) Likewise, Jung believed that psychoses were of psychosomatic origin, sometimes rooted in organic anomalies, but quite usually they were caused by the overwhelming invasion of unconscious imagery into the conscious mind (Jung, 1972). Thus, Jung asserted that the images that were torturing the psychotic patient should not be considered as merely apocryphal or imaginary, but image and the body were, somehow, intermixed in the psychosomatic phenomenon. The confusing experiences of the psychotic were indeed *subjectively real* and the imagery itself can be regarded as a *context from which meaning could be extracted*. In hallucinatory states, as discussed in *Part Two*, imaginal objects of the phenomenal field behave as if they were real (or even "more real than real"). In Husserl and Merleau-Ponty, the experience of subjectivity is formed on the verge of the ego-

cogito and transcendental self. However, in a wider psychological context, the definitive "I" requires a discrimination between the "self" and "non-self" that is a sort of "psychological separation". In developmental psychology, the body image as a "vessel" is generated through multiple processes including the intersubjective dynamics of mother and infant. Cognition of the "interior" (e.g. lived experiences of heartbeat, breathing, posture, etc.) and the "exterior" (e.g. sensory cues) all contribute to buildup of self/non-self discrimination. Modern phenomenological accounts of the lived body also refer to this kind of "Leib-genesis" as fundamentally constitutive of the reference and subsystems of body-cognition later in adulthood (Gallagher and Zahavi, 2012). However, not all of the somatic events are actually symbolized in this manner. As mentioned above, Jung coined the term "subtle body" to refer to the *somatic unconscious* which can be understood as domain that contains subliminal perceptions and aspects of the Leib as well as the physical body itself. As Kradin says:

> "Whereas the cues derived from exterior and interior space are processed coterminously by the nervous system in innumerable ways, these events are invariably configured upon an archetypal template, so that the similarities of the human experience of 'self' far exceed differences between individuals. It is the archetypal and collective nature of the psychosomatic experience that prefigures the experience of the *participation mystique* and the empathic processes that characterize the various depth psychologies. The imaginal body is a psychological construct derived from images that are constantly, but with a high degree of reproducibility, re-created from present environmental cues, memories, and archetypal phantasies throughout the life cycle. These images are critically evaluated and referenced by the individual. The immature ego and its derivative super-ego strive to produce a unique and acceptable body image. The positively valued aspects of the imaginal body are presented to the outside world as an 'embodied' persona, whereas those morphological and functional aspects of the body that are unacceptable are disavowed and relegated to the somatic 'shadow'. By early adulthood, a more or less final version of the imaginal body has reified within the mind and tends to resist change." (Kradin, 1997, 409; see also Kradin, 2004)

In my opinion, Kradin's idea of the *imaginal body is – at least – comparable with the Leib* or rather an *alternative expression of the phenomenal lived body*. This is becoming

especially lucid if we have a look at another passage where intersubjective, social, and cultural factors are also included:

> "The construction of the imaginal body is influenced by subjective and societal factors. Caretakers, teachers, friends, as well as the prevailing collective aesthetic, religious, and scientific perspectives, can contribute to its final form. These same elements will influence how the imaginal body is pathologized and the form expressed by the psychosomatic symptom. Consequently, the appearances assumed by psychosomatic symptoms in society can change with time and collective norms. In quite the same way that modern man dreams more frequently of airplanes and automobiles than of horses and buggies, the psychosomatic symptom has been intrapsychically adapted to the conditions of the twentieth century." (Kradin, *ibid*)

According to this – and referring to the above mentioned characteristics of the placebo-response complex – psychosomatic disorders are actually *manifestations of disturbances in the ego-Self axis*. Kradin explicitly asserts that "abnormalities in bow the imaginal body develops are at the core of the psychosomatic disorders." (Kradin, 1997, 410) Through the presentation of her clinical cases, Sidoli reached a similar conclusion:

> "It appears that psychosomatic patients lack fantasies. In them the link between the instinctual pole of the experience and its mental representation has been broken - or never established. Thus, the proto-images – as archaic proto-fantasy/bodily elements – have remained buried or encapsulated in the unconscious bodily pole of the archetype." (Sidoli, 1993, 180)

As above, psychosomatic symptoms (their appearance, symbolism, and other characteristics) are largely affected by the cultural environment of the subject merging the life-world ("flesh of the world") and the "flesh of the body" with individual psychic structures in an act of symbolization. As I presumed in previous chapters, *the Leib serves as an interface or node through which this symbolization becomes possible and manipulable*. Thus I propose the idea of a novel approach which aims to ground its diagnosis and therapeutic interventions in the phenomenal lived body. I call this approach "Leibanalysis" here as it primarily focuses on the Leib: the very intersection

of the bodily, psychic, and sociocultural aspects of the individual. The methodology of Leibanalysis differs from that of other similar approaches such as Daseinanalysis.[89] Unlike psychoanalysis and Daseinanalysis, Leibanalysis does not stress the exclusive importance of psychic and/or social-psychological events in psychosomatics rather *harnesses the empirical power of phenomenology in combination with analytical psychological characterization of the subjective experience*. This way, Leibanalysis, as established on the ground of my previous theses (as in *Parts Two* and *Three*), primarily accentuates the *bi-directional dynamics* and *malleable nature of the Leib* as far as psychosomatic signaling is concerned. As mentioned above, the Leib becomes "malleable, manipulable" in psychedelic states (or in other altered states of consciousness) allowing one to "reset" and correct disruptions of the ego-Self axis that may followed by somatic alterations ("healing") through the associated phenomenon of psychointegration. Psychoanalytical and body-oriented therapies usually offer and use therapeutic engagements and environments grasping either the body or the "soul/mind/cognitive self" as the major reference point of their therapeutic process (Leitan and Murray, 2014). Leibanalysis *does not want to claim itself a "therapy"* rather an *approach that – although may sprout future therapies – is, in essence, a field of discussion and a medium of general philosophical-psychological inquiry* concerning psychosomatics.

4.4 Concluding remarks

Under appropriate conditions, altered states of consciousness, whether they are induced by psychoactive substances or other non-pharmacological methods, have been shown to have therapeutic potential in psychotherapy (Hill, 2013; Majic et al., 2015;

[89] Unlike Daseinanalysis – which considers the person as-within-the-life-world in a psychoanalytic manner –, Leibanalysis mainly deals with *psychosomatic events* that are linked to both the body and the psychosocial setting of the individual. While the followers of Daseinanalysis, according to Binswanger's major concept, believe that the variety of pathological and quasi-pathological mental issues root in the dilemma of coexistence with other human beings and – yet – being ultimately alone. Daseinanalysis also erase the dualistic aspect of mind-body relations and is regarded as a form of psychoanalysis with alternative interpretation of the subjective experience (Boss, 1963). Furthermore, by quoting Boss, Alexander and others, Condrau (1992) shows that Daseinanalytic psychosomatics primarily regards bodily disorders as the symbolic expressions of conversion symptoms due to their „affective relevance". Leibanalysis, in turn, *emphasizes the dynamic interaction and equal importance of mind and body* with regards to the sociocultural environment.

Sandison and Whitelaw, 1957). These conditions involve the presence of a skilled and experienced leader (a therapist, shaman, etc.), and an adequate set and setting with the equal contribution of both therapist and patient. I suggest here that psychedelic states do not only have therapeutic value in psychotherapy but may also be useful in the treatment of psychosomatic disorders, and may expand our knowledge about the underlying processes of the somatization phenomenon. Applying the Jungian framework of feeling-toned complexes, I hypothesize that altered states of consciousness might help to access and mobilize the placebo response complex in a controlled therapeutic setting leading to the amelioration of physical symptoms. This method would aim to create three scenarios: 1) mobilizing psychic energies via symbolic communication with the Self to initiate the activity of the placebo response complex, thus facilitating the healing of the body; 2) in psychedelic and interpersonal therapies specifically target a certain complex or complexes with repressed affective content(s) in order to „de-couple" the related, embodied somatic symptom(s); 3) eliminating the negative therapeutic reaction, or – in Kradin's term – the *nocebo complex* via transgressing the habituated destructive (implicit) schemas and activating the pre-symbolic phase of self-soothing. This approach is called "Leibanalysis" here as it focuses on the experiential features of the lived body and its connection-interaction-dynamic relation with all the interior and exterior aspects of the ego-consciousness and ego-Self axis.[90]

Psychoanalysis and phenomenology has already been compared by virtue of their explanatory potential and common epistemic grounding in the Leib experience. Although they seem antagonistic initially, both root in the Cartesian idea of "clear and distinct perception", that is the essential transparency of consciousness as far as its experiential contents are concerned (Fuchs, 2011). Furthermore, the Leib has been suggested as part of the unconscious physically manifested through "body memory", finely nuancing the various niches of perception:

[90] While the placebo-response complex works by means of *regression* a crucial question may arise: what if the caregiver was unable to appropriately mirror the child and give him the template of the state of well-being? As Winnicott pointed out, even in the absence of a maternal counterpart, self-soothing is possible through the use of *transitional objects* (e.g. pillow, doll) by the infant (Winnicott, 1959). Kradin refers to these transitional objects as "protosymbols" that "…can further mediate the psychophysical effects of self-soothing and it follows that placebos may be part of the set of transitional objects." (Kradin, 2004, 627). In this respect the Self – as the locus of integrity and well-being – is not only rises from relational development but it could be and inherent self-regulatory function in the psyche and brain.

> "From the point of view of a phenomenology of the lived body, the unconscious is not an intrapsychic reality residing in the depths 'below consciousness'. Rather, it surrounds and permeates conscious life, just as in picture puzzles the figure hidden in the background surrounds the foreground, and just as the lived body conceals itself while functioning. It is an unconscious which is not located in the *vertical* dimension of the psyche but rather in the *horizontal* dimension of lived space, most of all lodging in the intercorporeality of dealings with others, as the hidden reverse side of day-to-day living. It is an unconscious which is not to be found inside the individual but in his relationships to others." (Fuchs, 2011, 78; *italics original*)

In agreement with this, repressed unconscious contents – expressed as psychosomatic bodily symptoms – may be grasped by phenomenological analysis.

It is enticing to speculate that the activated affective and symbolic states, engendered by *e.g.* psychedelic experiences, show a way to the basic core of the collective unconscious (the *Imago Dei* or Self). This process then, by means of internal impulses from the Self, may lead to the mobilization of the otherwise pathologically inactive placebo response complex. The activated placebo response complex subsequently exerts its restorative function on the physical body leading to the alleviation of symptoms. On the other hand, if a psychosomatic symptom is successfully identified as a result of a repressed affective content bound by a certain complex, communication with the Self through various therapeutic narratives or rituals ("O Father, hear me as I pray to Thee!", "Heal me, O, Gods of Earth and Sky!", etc.) may lead to the deconstruction of the complex and disappearance of bodily symptoms coupled to its energies. In both cases, *altered/psychedelic states have a pivotal role* in establishing a channel of communication between the Self and ego-consciousness.

I assume that in this regard, in a proper therapeutic setting, mobilizing energies of the Self via an identified and characterized placebo-response complex may lead to the healing of the body. This may be of important therapeutic potential, as symbolic "restoration or reprogramming" of the psychosomatic integrity of the person through psychic images may involve a complete physical healing process. The recent discussions around psychedelic therapies may promise an accelerated process of disabling pathogenic complexes by means of restoration of the ego-Self communication axis. Furthermore, the theory of complexes and especially the placebo response complex could be a fruitful clinical model that gives a spiritually inclined but also

scientific alternative to the therapist for interpreting the patients' underworld journeys. In the model proposed in this work, altered states, such as breathing techniques, guided meditation, active imagination or especially psychedelic-enhanced psychotherapy, are identified as *methods which establish "passageways" between the ego-consciousness and the transcendental Self*. The Leib appears to be a window through which the process itself is *unfolded in the phenomenal field* allowing one to actively *perceive, modulate or manipulate this manifold psychosomatic dynamics*. In a possible therapeutic setting, with proper training, a therapist may be able to help the patient to reconnect with and liberate energy from long-repressed complexes or to activate the restorative placebo response complex. Naturally, this method raises several issues that require further strict, objective investigations and technical considerations.

So far, the whole mission of finding novel ways of healing in modern Western medicine has been illusory when the question of mind-body dualism has been addressed, particularly since the last century. Although seemingly heading towards a holistic understanding of the human phenomenon, Western medicine has long been known to vastly promote a reductionist-monist stance in terms of its epistemic approach and methodology. As a major Cartesian heritage, in modern science, the body is considered to be a biochemical machine, a possible object of analytic examination and manipulation, while the soul is gradually losing its immaterial-metaphysical attributes and becoming the derivative of brain (bodily) processes.[91] Interestingly, in the early stages of medical sciences, the objectification of the patient gave birth to a distinctive *epistemological dualism* where *direct observation* and *subjective cognition* form the dipole of knowing (Sullivan, 1986). According to the 19th century French physician Bichat, the body (i.e. physical examination, autopsy, etc.) must be the very basis of medical knowledge. Therefore, physical inspection has its absolute authority over the "patient's subjective account of distress" that is "deemed unreliable and essentially irrelevant" as far as the final diagnosis is concerned (Kirmayer, 1988, 59). As Kirmayer puts it:

> "The body revealed its disease to the doctor without the need for the patient's self-interpretation. The real dualism in modern medicine… / …is not between two substances but between the physician as active knower and the patient as passive

[91] Please also see *chapters 2.6.1* and *2.6.2* where we briefly touched the relevant philosophical aspects of the topic.

> known. This duality is captured in the distinction between disease and illness… / …Disease stands for the biological disorder, or, more accurately, the physician's biomedical interpretation of disorder, while illness represents the patient's personal experience of distress. In biomedicine, these two aspects of distress are accorded different status and it is "real disease" that is viewed as the true object of medicine." (Kirmayer, 1988, 59-60)

This obvious split between the disease as an *anomaly of the physical body/Körper* and the inner, psychic representation or *experiential features of the disease* (emerging from the *lived body/Leib*) poses a tension in recent therapeutic approaches. A "true" psychosomatic therapy should therefore address, include and merge both the *private-phenomenological* and the *public-physical* aspects of the disease state, and focus on both while establishing a diagnosis and subsequently the possible ways of healing. As we have seen above, the "mixed etiology" of a psychosomatic disease necessarily entails both the inner/mental and the outer/bodily existential-experiential dimensions of the individual with all the family history, social background, cultural milieu, etc. which the person is embedded into. In summary, an ultimate therapeutic method would be essentially holistic by its nature, including as many aspects of the patient as possible, unifying the philosophical-phenomenological, social-psychological, and bodily-medical dimensions as well. This work was primarily intended to *stimulate discussions about psychosomatics* between different areas of expertise in order to gain novel insights into the topic of mind-body relations, as well as to bring up novel ideas about altered states of consciousness (within a chimera-context of philosophy, analytical psychology, and medicine) that may be added as small pieces to the greater picture of future phenomenology-inspired somatic therapies.

5. ACKNOWLEDGEMENT

I would like to thank my friend and supervisor Dr. István Kelemen for his excellent professional mentorship, continuous support and inspiration during my entire Ph.D. and pre-Ph.D. period. I am grateful for the opportunity to train and work under his wings of philosophical excellence.

Special thanks to Dr. Lajos Horváth whose contribution was absolutely crucial in the theoretical elaboration and shaping of this work. He was always extremely kind, eager to help, and provided me with excellent support in the theoretical outlining of my dissertation. His guidance was also essential on my path discovering the realm of phenomenology.

I am thankful for Dr. Kristóf Bodnár and Dr. Szabina Péter, my dear friends and fellow philosophers, for their valuable suggestions, constructive advices, the inspiring technical and non-technical discussions, and for all the happy moments during my years in Debrecen.

I wish to thank my friends and colleagues, Dr. Ede Frecska, Dr. Luis Eduardo Luna, and Dr. Csaba Szummer for showing me the importance and the multifarious faces of psychedelic research in medicine, philosophy, psychology, anthropology, and culture.

I would like to thank the whole staff of the Institute of Philosophy (University of Debrecen, Faculty of Arts and Humanities) for the supporting and friendly environment.

And last, but not least I am sincerely grateful to my wonderful fiancée, my family, and to all of my dear friends helping me get through the difficult times, and for their emotional support and encouragement.

SUMMARY

This work is aimed to characterize the major philosophical aspects of the psychosomatic phenomenon by means of the tools of contemporary phenomenology and analytical psychology. Following a brief historical review about the complicated matters of consciousness in philosophy and science, some of the basic concepts of the phenomenological tradition – focusing on Husserl's and Merleau-Ponty's phenomenology, and e.g. Gallagher's and Thompson's works – are used to outline the major philosophical features of embodied mind. Certain parts of the methodology of Jungian and post-Jungian analytical psychology – together with the theories of classic and modern phenomenology and embodiment – are suggested as possible, and powerful explanatory tools to describe and specify the features of the psychosomatic phenomenon within the context of altered states of consciousness (including but not restricted to psychedelic states). Furthermore, it is hypothesized here that altered conscious states can be understood as parts of an unique healing mechanism highly resembling to the psychosomatic features of nocebo/placebo-response complex with promising therapeutic potential in the treatment of various psychosomatic diseases when co-applied with embodiment-rooted approaches. The major goal of this work is to point out to the mutually enlightening relation of altered states of consciousness and Jungian depth psychology within the context of philosophical and biomedical investigations.

KEYWORDS: phenomenology, embodiment, philosophy and science of consciousness, Jungian and post-Jungian analytical psychology, altered states of consciousness, psychosomatics

ÖSSZEFOGLALÁS (*in Hungarian*)

A disszertáció célja a pszichoszomatika főbb filozófiai aspektusainak bemutatása a kortárs fenomenológia és analitikus pszichológia eszköztárainak felhasználásával. A tudat kérdéskörének rövid filozófia- és tudománytörténeti áttekintését követően, a fenomenológiai tradíció alapfogalmainak felhasználásával (Husserl, Merleau-Ponty, Gallagher, Thompson, stb. munkái nyomán) vázolom a *megtestesült elme* koncepció főbb filozófiai jellegzetességeit. A Jungiánus és poszt-Jungiánus analitikus pszichológia módszertanának bizonyos elemei, együtt alkalmazva a klasszikus és modern fenomenológia és megtestesült elme tanaival, lehetséges és hatásos magyarázó eszközként jelennek meg, melyekkel a pszichoszomatikus jelenségek jellemzése és leírása lehetővé válik a módosult tudatállapotok (ide értve a pszichedelikus tudatállapotokat is) tágabb értelmezési kontextusán belül. Feltételezésem szerint – megtestesült elme-alapú megközelítésekkel együtt alkalmazva – a megváltozott tudatállapotok olyan egyedi gyógyító mechanizmusok alapfeltételeként is értelmezhetőek, melyek nagyban átfednek a nocebo/placebo-válasz komplexus pszichoszomatikus tulajdonságaival, és ígéretes terápiás potenciállal rendelkezhetnek számos pszichoszomatikus betegség esetében. Jelen munka fő célja, hogy rámutasson a módosult tudatállapotok és a Jungiánus mélylélektan kölcsönösen hasznos és gyümöcsöző kapcsolatára a filozófiai és biomedikális kutatások kontextusában.

KULCSSZAVAK: fenomenológia, megtestesült elme, elmefilozófia és tudat-tudomány, Jungiánus és poszt-Jungiánus analitikus pszichológia, módosult tudatállapotok, pszichoszomatika

REFERENCES

Ader, Robert (1995): Historical perspective on psychoneuroimmunology. In: Friedman, Herman, Klein, Thomas W., and Friedman, Andrea L. (eds.): *Psychoneuroimmunology, Stress, and Infection.* New York: CRC Press

Allison, Henry E. (1983): *Kant's Transcendental Idealism: An interpretation and defense.* New Haven: Yale University Press

Anisman, H. et al. (2007): Interferon-alpha effects are exaggerated when administered on a psychosocial stressor backdrop: cytokine, corticosterone and brain monoamine variations. *Journal of Neuroimmunology* 186: 45-53.

Beischel, J. et al. (2011): Reconceptualizing the field of altered consciousness: A 50-year retrospective. In Cardena, E. and Winkelman, M. (eds.): *Altering Consciousness: Multidisciplinary Perspectives.* Oxford: Praeger, pp. 113-135.

Bennett, M. R. and Hacker, P. M. S. (2006): *Philosophical Foundations of Neuroscience.* Oxford: Blackwell

Bennett, M. R., Dennett, D., Hacker, P. M. S., and Searle, J. (2007): *Neuroscience and Philosophy, Brain, Mind, and Language.* New York: Columbia University Press

Bernet, Rudolf (1996): The Unconscious Between Representation and Drive: Freud, Husserl, and Schopenhauer. In: Drummond, J. J. and Hart, J. G. (eds.): *The Truthful and the Good: Essays in Honor of Robert Sokolowski (Contributions To Phenomenology).* Dordrecht: Springer, pp. 81-95.

Besedovsky, Hugo O. et al. (1981): Lymphokine-containing supernatants from con A-stimulated cells increase corticosterone blood levels. *Journal of Immunology* 126: 385-387.

Besedovsky, Hugo O. and del Rey, Adriana (2006): Regulating inflammation by glucocorticoids. *Nature Immunology* 7: 537.

Besedovsky, Hugo O. and del Rey, Adriana (2007): Physiology of psychoneuroimmunology: a personal view. *Brain, Behavior, Immunity* 21: 34-44.

Bickle, John and Ellis, Ralph (2005): Phenomenology and Cortical Microstimulation. In: Smith, David Woodruft and Thomasson, Arnie L. (eds.): *Phenomenology and Philosophy of Mind.* Oxford: Oxford University Press

Blainey, Marc G. (2014): Forbidden Therapies – Santo Daime, Ayahuasca, and the Prohibition of Entheogens in Western Society. *Journal of Religion and Health* 54: 287-302.

Blalock, J. E. et al. (1985): Peptide hormones shared by the neuroendocrine and immunologic systems. *Journal of Immunology* 135: (2 Suppl) 858s-861s.

Blalock, J. E. and Smith, E. M. (2007): Conceptual development of the immune system as a sixth sense. *Brain, Behavior, Immunity* 21: 23-33.

Bosnak, R. (2007): *Embodiment: Creative Imagination in Medicine, Art and Travel.* London: Routledge

Boss, Medard (1963): *Psychoanalysis and Daseinsanalysis.* New York: Basic Books.

Bovensiepen, Gustav (1993): The Body as Container for the Transcendent Function. In: Mattoon, Mary Ann (ed.): *Chicago 1992: The Transcendent Function: Individual and Collective Aspects.* Einsiedeln: Daimon Verlag, pp. 242-249.

Brentano, Franz (1995): *Psychology from an Empirical Standpoint* (trans: Rancurello, Terrell, and McAlister). New York: Routledge

Burnet, Frank Macfarlane (1941): *The Production of Antibodies.* Melbourne: Macmillan

Cambray, Joseph (2012): *Synchronicity: Nature and Psyche in an Interconnected Universe (Carolyn and Ernest Fay Series in Analytical Psychology).* College Station: Texas A&M University Press

Capuron, L. and Miller, A. H. (2011): Immune system to brain signaling: neuropsychopharmacological implications. *Pharmacology & Therapeutics* 130: 226-238.

Carbone, Mauro (2004): *The Thinking of the Sensible: Merleau-Ponty's A-Philosophy.* Evanston: Northwestern University Press

Carman, Taylor (1999): The Body in Husserl and Merleau-Ponty. *Philosophical Topics* 27: 205-226.

Carr, David (2010a): The Crisis as Philosophy of History. In: Hyder, David and Rheinberger, Hans-Jörg (eds.): *Science and the Life-world. Essays on Husserl's 'Crisis of European Sciences'.* Stanford: Stanford University Press

Carr, David (2010b): Transcendental and empirical subjectivity: The self in the transcendental tradition. In: Welton, Don (ed,): *The New Husserl: A Critical Reader*. Bloomington: Indiana University Press, pp. 181–199.

Chalmers, David (1995): Facing Up to the Problem of Consciousness. *Journal of Consciousness Studies* 2: 200-219.

Chen, X. et al. (2013): The role of gut microbiota in the gut-brain axis: current challenges and perspectives. *Protein Cell* 4: 403-414.

Chodorow, J. (1997): *Encountering Jung: On Active Imagination.* Princeton: Princeton University Press.

Christensen, T. M. and Brumfield, K. A. (2010): Phenomenological designs: The philosophy of phenomenological research. In: Sheperis, C. J. , Young, J. S. , and Daniels, M. H. (eds.): *Counseling research: Quantitative, qualitative, and mixed methods.* Upper Saddle River: Pearson Education

Clark, Andy (1998): *Being There: Putting Brain, Body, and World Together Again.* Cambridge: MIT Press

Collins, Arthur W. (1999): *Possible Experience.* Berkeley: University of California Press

Collins, S. M. et al. (2012): The interplay between the intestinal microbiota and the brain. *Nature Reviews Microbiology* 10: 735-742.

Condrau, Gion (1992): *Sigmund Freud und Martin Heidegger: Daseinsanalytische Neurosenlehre und Psychotherapie.* Bern: Verlag Hans Huber

Conger, John P. (2005): *Jung and Reich – The Body as Shadow.* Berkeley: North Atlantic Books

Connolly, Angela (2015): Bridging the reductive and the synthetic: some reflections on the clinical implications of synchronicity. *Journal of Analytical Psychology* 60: 159-178.

Crick, Francis (1995): *The Astonishing Hypothesis.* New York: Simon & Schuster

Crist, Eileen and Tauber, Alfred I. (2000): Selfhood, Immunity, and the Biological Imagination: The Thought of Frank Macfarlane Burnet. *Biology and Philosophy* 15: 509-533.

Damasio, Antonio (2005): *Descartes' Error: Emotion, Reason, and the Human Brain.* New York: Penguin Books

Dantzer, R. et al. (2008): From inflammation to sickness and depression: when the immune system subjugates the brain. *Nature Reviews Neuroscience* 9: 46-56.

Daruna, Jorge H. (2012): *Introduction to Psychoneuroimmunology*. San Diego: Academic Press

Descartes, René (1985a): Discourse on Method. In: Cottingham, John, Stoothoff, Robert and Murdoch, Dugald (trans.): *The Philosophical Writings of Descartes: Volume I.* Cambridge: Cambridge University Press

Descartes, René (1985b): Description of the Human Body and of all its Functions. In: Cottingham, John, Stoothoff, Robert and Murdoch, Dugald (trans.): *The Philosophical Writings of Descartes: Volume I.* Cambridge: Cambridge University Press

Descartes, René (1985c): Principles of Philosophy. In: Cottingham, John, Stoothoff, Robert and Murdoch, Dugald (trans.): *The Philosophical Writings of Descartes: Volume I.* Cambridge: Cambridge University Press

Descartes, René (1984): Meditations on First Philosophy. In: Cottingham, John, Stoothoff, Robert and Murdoch, Dugald (trans.): *The Philosophical Writings of Descartes: Volume II.* Cambridge: Cambridge University Press

Donati, Marialuisa (2004): Beyond synchronicity: the worldview of Carl Gustav Jung and Wolfgang Pauli. *Journal of Analytical Psychology* 49: 707-728.

Douglas-Escobar, M. et al. (2013): Effect of intestinal microbial ecology on the developing brain. *JAMA Pediatrics* 167: 374-379.

Dinan, Timothy G. (2009): Inflammatory markers in depression. *Current Opinion in Psychiatry* 22: 32-36.

Dinan, Timothy G. et al. (2015): Collective unconscious: how gut microbes shape human behavior. *Journal of Psychiatric Research* 63: 1-9.

Engel, George L. (1977): The need for a new medical model: A challenge for biomedicine. *Science* 196: 129-136.

Engel, George L. (1980): The clinical application of the biopsychosocial model. *American Journal of Psychiatry* 137: 535-544.

Farthing, G. W. (1992): *The Psychology of Consciousness.* New Jersey: Prentice-Hall

Feest, Uljana (2012): Husserl's Crisis as a crisis of psychology. *Studies in History and Philosophy of Biological and Biomedical Sciences* 43: 493-503.

Firth, Chris and Rees, Geraint (2007): A Brief History of the Scientific Approach to the Study of Consciousness. In: Velmans, M. & Schneider, S. (eds.): *The Blackwell Companion to Consciousness*. Oxford: Blackwell, pp. 9-23.

Flanagan, Owen J. (1991): *The Science of the Mind (second ed.).* Cambridge: The MIT Press

Fordham, F. (1966): *An Introduction to Jung's Psychology*. London: Penguin Books

Fordham, M. (1957): *New Developments in Analytical Psychology*. London: Routledge & Kegan Paul

Forrest, Peter (2007): Sprigge's Spinoza. In: Basile, Pierfrancesco and McHenry, Leemon B (eds.): *Consciousness, Reality and Value: Essays in Honour of T. L. S. Sprigge*. Heusenstamm: Ontos Verlag

Forsythe, P. et al. (2012): On communication between gut microbes and the brain. *Current Opinion in Gastroenterology* 28: 557-562.

Føllesdal, Dagfinn (2010): The Lebenswelt in Husserl. In: Hyder, David and Rheinberger, Hans-Jörg (eds.): *Science and the Life-world. Essays on Husserl's 'Crisis of European Sciences'.* Stanford: Stanford University Press

Frecska, Ede and Luna, Luis Eduardo (2006): Neuro-ontological interpretation of spiritual experiences. *Neuropsychopharmacologia Hungarica* 8: 143-153.

Frecska, Ede et al. (2012): Enhancement of creative expression and entoptic phenomena as after-effects of repeated ayahuasca ceremonies. *Journal of Psychoactive Drugs* 44: 191-199.

Frecska, Ede et al. (2013): A possibly sigma-1 receptor mediated role of dimethyltryptamine in tissue protection, regeneration, and immunity. *Journal of Neural Transmission* 120: 1295-1303.

Freud, Sigmund (2004): *The History of the Psychoanalytic Movement.* Whitefish: Kessinger Publishing

Freud, Sigmund (2015): *Selected Papers on Hysteria and Other Psychoneuroses (trans: Brill, A. A.).* North Charleston: CreateSpace Independent Publishing Platform

Friedman, Michael (2010): Science, History, and Transcendental Subjectivity in Husserl's Crisis. In: Hyder, David and Rheinberger, Hans-Jörg (eds.): *Science and the Life-world. Essays on Husserl's 'Crisis of European Sciences'.* Stanford: Stanford University Press

Fuchs, T. and Schlimme, J. E. (2009): Embodiment and psychopathology: a phenomenal perspective. *Current Opinion in Psychiatry* 22: 570-575.

Fuchs, Thomas (2011): Body Memory and the Unconscious. In: Lohmar, D. and Brudzinska, J. (eds.): *Founding Psychoanalysis Phenomenologically: Phenomenological Theory of Subjectivity and the Psychoanalytic Experience*. Dordrecht: Springer, pp. 69-82.

Gallagher, Shaun (1986). Hyletic experience and the lived body. *Husserl Studies* 3: 131-166.

Gallagher, Shaun (2011): *How the Body Shapes the Mind?* Oxford: Oxford University Press

Gallagher, Shaun and Zahavi, Dan (2012): *The Phenomenological Mind (2nd ed.).* New York: Routledge

Gallagher, Shaun and González, Juan C. (2014): Time, Altered States of Consciousness, And Science. *Cosmology* 18: 246-262.

Gibson, J. J. (1977): The theory of affordances. In: Shaw, R. and Bransford, J. (eds.): *Perceiving, Acting, and Knowing: Toward an Ecological Psychology.* Hillside: Lawrence Erlbaum

González-Maeso, J. and Sealfon, S. C. (2009): Psychedelics and schizophrenia. *Trends in Neurosciences* 32: 225-232.

Goodrich, Barbara Gwenn (2010): We Do, Therefore We Think: Time, Motility, and Consciousness. *Reviews in the Neurosciences* 21: 331-361.

Gras, Vernon W. (1973): *European Literary Theory and Practice: From Existential Phenomenology to Structuralism.* New York: Doubleday

Grob, C. S. and Bravo, G. (2005): The high road: history and hysteria. In: Walsh, R. and Grob, C. S. (eds.): *Higher Wisdom: Eminent Elders Explore the Continuing Impact of Psychedelics.* New York: State University of New York Press, pp. 7-18.

Groddeck, Georg (1977): *The Meaning of Illness – Selected Psychoanalytic Writings.* New York: International Universities Press

Grof, Stanislav (1985): *Beyond the Brain: Birth, Death, and Transendence in Psychotherapy.* Albany, New York: State University of New York Press

Grof, Stanislav and Bennett, Hal Zina (1993): *The Holotropic Mind.* San Francisco: HarperSanFrancisco

Grof, Stanislav (2001): The potential of entheogens as catalysts of spiritual development. In: Roberts, T. (ed.): *Psychoactive sacramentals: Essays on entheogens and religion.* San Francisco: Council on Spiritual Practices, pp. 27-45.

Grof, Stanislav (2008): *LSD Psychotherapy.* Sarasota: MAPS

Halaris, Angelos (2009) Comorbidity between depression and cardiovascular disease. *International Angiology* 28: 92-99.

Heinämaa, Sara (2011): The body. In: Luft, Sebastian and Overgaard, Soren (eds.): *The Routledge Companion to Phenomenology.* London, New York: Routledge, pp. 222-232.

Heinämaa, Sara (2014): Merleau-Ponty: A Phenomenological Philosophy of Mind and Body. In: Bailey, Andrew (ed.): *Philosophy of Mind: The Key Thinkers.* London: Bloomsbury Academic

Henningsen, P. and Kirmayer, L. J. (2000): Mind beyond the net: implications of cognitive neuroscience for cultural psychiatry. *Transcultural Psychiatry* 37: 467-494.

Hernandez, M. E. et al. (2008): Variations in circulating cytokine levels during 52 week course of treatment with SSRI for major depressive disorder. *European Neuropsychopharmacology* 18: 917-924.

Hill, Scott J. (2013): *Confrontation with the Unconscious. Jungian Depth Psychology and Psychedelic Experience.* London: Muswell Hill Press

Horvath, Lajos (2010): *A tudat metamorfozisa. Az interdiszciplinaris tudatkutatas tudomanyfilozofiai-hermeneutikai elemzese.* – PhD dissertation (in Hungarian)

Horvath, Lajos (2011): Neurofenomenologia es a Megtestesult Elme. Transzdiszciplinaris Dialogus az Idegtudomany es a Fenomenologia Kozott. *Magyar Tudomany* 172: 1306-1315. (in Hungarian)

Husserl, Edmund (1965): Philosophy as Rigorous Science. In: Laurel, Quentin (trans.): *Phenomenology and the Crisis of Philosophy.* New York: Harper & Row, pp. 71-147.

Husserl, Edmund (1970): *The Crisis of European Sciences and Transcendental Phenomenology. An Introduction to Phenomenological Philosophy (trans: Carr, David).* Evanston: Northwestern University Press

Husserl, Emund (1973): *Experience and Judgment: Investigations in a Genealogy of Logic (ed. & trans: Landgrebe, Ludwig).* Evanston: Northwestern University Press

Husserl, Edmund (1977): *Phenomenological Psychology: Lectures, Summer Semester, 1925 (trans: Scanlon, John).* Boston: Martinus Nijhoff Publishers

Husserl, Edmund (1983): *Ideas Pertaining to a Pure Phenomenology and to Phenomenological Philosophy (trans: Kersten, F.).* Boston: Martinus Nijhoff Publishers

Husserl, Edmund (1997): *Ding and Space: Lectures of 1907 (trans: Rojcewitz, Richard).* Dordrecht: Springer Science & Business Media

Husserl, Edmund (1999a): *Cartesian Meditations. An Introduction to Phenomenology (trans: Cairns, Dorion).* Dordrecht: Kluwer Academic Publishers

Husserl, Edmund (1999b): *The Idea of Phenomenology. A Translation of Die Idee der Phiinomenologie Husserliana II. (trans: Hardy, Lee).* Dordrecht: Springer Science & Business Media

Husserl, Edmund (2008): Die Lebenswelt: Auslegungen der vorgegebenen Welt und ihrer Konstitution. In *Husserliana: Edmund Husserl: Gesammelte Werke 39*. Dordrecht: Springer

Huxley, Aldous (1963): *The Doors of Perception* and *Heaven and Hell.* New York: Harper & Row

Huxley, Aldous, Palmer, C., Horowitz, M. (1977): *Moksha: Writings on Psychedelics and the Visionary experience (1931–1963).* New York: Stonehill.

Huxley, Aldous (2009): *The Perennial Philosophy.* New York: HarperCollins

Irwin, M. R. et al. (2011): Major depressive disorder and immunity to varicella-zoster virus in the elderly. *Brain, Behavior, Immunity* 25: 759-766.

Jacobi, J. (1959): *Complex, Archetype, Symbol.* Princeton University Press, Princeton

Johnson, A. K. and Grippo, A. J. (2006): Sadness and broken hearts: neurohumoral mechanisms and co-morbidity of ischemic heart disease and psychological depression. *Journal of Physiology and Pharmacology* 57 Suppl 11: 5-29.

Jones, K. A. and Thomsen, C. (2013): The role of the innate immune system in psychiatric disorders. *Molecular and Cellular Neuroscience* 53: 52-62.

Jones, Raya (2007): *Jung, Psychology, Postmodernity.* New York: Routledge

Jung, Carl Gustav (1919): *Studies in Word-Association. Experiments in the Diagnosis of Psychopathological Conditions Carried Out at the Psychiatric Clinic of the University of Zurich (trans: Eder, M. D.).* New York: Moffat, Yard & Co.

Jung, Carl Gustav (1966): *Psychology and Religion.* New Haven: Yale University Press

Jung, Carl Gustav (1969a): Psychology and Religion. In: *The collected works of C. G. Jung (Vol. 11.).* Princeton: Princeton University Press, pp. 3-105.

Jung, Carl Gustav (1969b): The Transcendent Function. In: *The collected works of C. G. Jung (Vol. 8.).* Princeton: Princeton University Press, pp. 67-79.

Jung, Carl Gustav (1969c): Psychological commentary on The Tibetan Book of the great liberation. In: *The collected works of C. G. Jung (Vol. 11.).* Princeton: Princeton University Press, pp. 475-508.

Jung, Carl Gustav (1970): *The Structure and Dynamics of the Psyche (Collected Works 8.).* London: Routledge & Kegan Paul

Jung, Carl Gustav (1971): *Psychological Types (Collected Works 6.).* London: Routledge & Kegan Paul

Jung, Carl Gustav (1972): The Psychology of Dementia Praecox. In: *The collected works of C. G. Jung (Vol. 3.).* Princeton: Princeton University Press, pp. 1-151.

Jung, Carl Gustav (1973a): *Synchronicity. An Acausal Connecting Principle (trans: Hull, R. F. C.).* Princeton: Princeton University Press

Jung, Carl Gustav (1973b): *Experimental Researches (Collected Works 2.).* London: Routledge & Kegan Paul

Jung, Carl Gustav (1974): *Aion: Researches into the Phenomenology of the Self (Collected Works 9; vol. II).* London: Routledge & Kegan Paul

Jung, Carl Gustav (1975a): Letter to A. M. Hubbard, 15th February 1955 (trans: Hull, R. F. C.). In: Adler, G. and Jaffe, A. (eds.): *C. G. Jung Letters (Vol. 2. 1951-1961).* Princeton: Princeton University Press, pp. 222-224.

Jung, Carl Gustav (1975b): Letter on 25th February 1953 (trans: Hull, R. F. C.). In: Adler, G. and Jaffe, A. (eds.): *C. G. Jung Letters (Vol. 2. 1951-1961).* Princeton: Princeton University Press

Jung, Carl Gustav (1980): *The Archetypes and the Collective Unconscious (trans: Hull, R. F. C.).* Princeton: Princeton University Press

Jung, Carl Gustav (1988): *Nietzsche's Zarathustra: Notes of the Seminar Given in 1934 – 1939.* Princeton: Princeton University Press

Jung, Carl Gustav (1989): *Memories, Dreams, Reflections (ed: Aniela Jaffe).* New York: Vintage

Kalsched, D. (1996): *The inner world of trauma: Archetypal defences of the personal spirit.* New York: Routledge

Kant, Immanuel (1969): Reflexion zur Medizin. In: Martin, Gottfried (ed.) *Kants gesammelte Schriften. (Bd.20).* Berlin: De Gruyter

Kant, Immanuel (1992): Dreams of a Spirit-Seer Elucidated by Dreams of Metaphysics. In: Walford, David and Meerbote, Ralf (trans.): *Theoretical Philosophy 1755-1770.* Cambridge: Cambridge University Press

Kant, Immanuel (1998): Critique of Pure Reason. In: Guyer, Paul and Wood, Allen W. (eds. & trans.): *The Cambridge Edition of the Works of Immanuel Kant*. Cambridge: Cambridge University Press

Kant, Immanuel (2012): Natural Science. In: Watkins, Eric (ed.), Schönfeld, Martin (trans.), Edwards, Jeffrey B. (trans.), Reinhardt, Olaf (trans.), Beck, Lewis White (trans.): *The Cambridge Edition of the Works of Immanuel Kant*. Cambridge: Cambridge University Press

Kenny, Anthony (2010): *A New History of Western Philosophy*. New York: Oxford University Press

Kennedy, J. B. (2003): *Space, Time and Einstein: An introduction*. London: Acumen

Kiraly, Csaba (2014): *Pszichoaktiv szerhasznalat eletminosegre gyakorolt hatasa, valamint a szerhasznalatok motivacioi es aspiracioi.* (manuscript in Hungarian)

Kirmayer, Laurence J. (1988): Mind and Body as Metaphors: Hidden Values in Biomedicine. In: M. Lock, D. Gordon (eds.): *Biomedicine Examined (Culture, Illness and Healing).* Dordrecht: Kluwer Academic Publishers, pp. 57-93.

Kirmayer, Laurence J. (2003): Reflections on Embodiment. In: Wilce, James M. Jr. (ed.): *Social and Cultural Lives of Immune Systems (Theory and Practice in Medical Anthropology and International Health).* London: Routledge, pp. 288-309.

Kradin, R. L. (1997): The psychosomatic symptom and the self: a sirens' song. *Journal of Analytical Psychology* 42: 405-423.

Kradin, R. L. (2004): The placebo response complex. *Journal of Analytical Psychology* 49: 617-634.

Kradin, R. L. (2011): Psychosomatic disorders: the canalization of mind into matter. *Journal of Analytical Psychology* 56: 37-55.

Krippner, S. and Sulla, J. (2000): Identifying spiritual content in reports from ayahuasca sessions. *The International Journal of Transpersonal Studies* 19: 59-76.

Kugler, P. (2008): Psychic imaging: a bridge between subject and object. In: Eisendarth, P. Y. and Dawson, T. (eds.): *The Cambridge Companion to Jung.* London: Springer, pp. 77-95.

Lakoff, George and Johnson, Mark (1999): *Philosophy in the Flesh: the Embodied Mind & its Challenge to Western Thought.* New York: Basic Books

Langer, Monika (2010): Sartre in the Company of Merleau-Ponty, Foucault and Duden. In: Morris, Katherine J. (ed.): *Sartre on the Body*. New York: Palgrave Macmillan, pp. 200-214.

Laywine, Alison (1993): *Kant's Early Metaphysics and the Origins of the Critical Philosophy.* Atascadero: Ridgeview Publishing Company

Leary, T., Metzner, R., Alpert, R. (2007): *The psychedelic experience: A manual based on the Tibetan book of the dead.* New York: Citadel Press (first edition published in 1964)

Leibniz, Gottfried Wilhelm (1989a): Letters to Louis Bourguet (1714-1715). In: Loemker, Leroy E. (trans.): *Gottfried Wilhelm Leibniz – Philosophical Papers and Letters.* Dordrecht: Kluwer Academic Publishers

Leibniz, Gottfried Wilhelm (1989b): The Monadology. In: Loemker, Leroy E. (trans.): *Gottfried Wilhelm Leibniz – Philosophical Papers and Letters.* Dordrecht: Kluwer Academic Publishers

Leibniz, Gottfried Wilhelm (1989c): Discourse on Metaphysics. In: Loemker, Leroy E. (trans.): *Gottfried Wilhelm Leibniz – Philosophical Papers and Letters.* Dordrecht: Kluwer Academic Publishers

Leibniz, Gottfried Wilhelm (2006): Letter to Thomas Burnett (2 February 1700). In: Strickland, Lloyd (trans.): *The Shorter Leibniz Texts. A Collection of New Translations.* New York: Continuum

Leitan, N. and Murray, G. (2014): The mind-body relationship in psychotherapy: grounded cognition as an explanatory framework. *Frontiers in Psychology* 5: 472.

Levine, Joseph (1983): Materialism and Qualia: The Explanatory Gap. *Pacific Philosophical Quarterly* 64: 354-361.

Lindsay, S. (2014): Can hyper-synchrony in meditation lead to seizures? Similarities in meditative and epileptic brain states. *Medical Hypotheses* 83: 465-472.

Lock, M. (1993): *Cultivating the Body: Anthropology and Epistemologies of bodily practice and knowledge.* New York: Basic Books

Look, Brandon C. (2000): Leibniz and the Substance of the *Vinculum Substantiale*. *Journal of the History of Philosophy* 38(2): 203-220.

Luna, Luis Eduardo (1984): The healing practices of a Peruvian shaman. *Journal of ethnopharmacology* 11: 123-133.

Lyon, M. L. (1990): Order and healing: the concept of order and its importance in the conceptualization of healing. *Medical Anthropology* 12: 249-268.

Majic, T., Schmidt, T. T., Gallinat, J. (2015): Peak experiences and the afterglow phenomenon: When and how do therapeutic effects of hallucinogens depend on psychedelic experiences? *Journal of Psychopharmacology* 29: 241-253.

Marcel, Gabriel (1965): *Being and Having. An Existentialist Diary.* New York: Harper & Row

Maslin, Keith T. (2005): *An Introduction to the Philosophy of Mind*. Cambridge: Polity Press

Maurer, H. H. (2010): Chemistry, pharmacology, and metabolism of emerging drugs of abuse. *Therapeutic Drug Monitoring* 32: 544-549.

McGuire, William (1974; ed.): *The Freud / Jung Letters: The Correspondence between Sigmund Freud and C.G. Jung – Bollingen Series, No. 94. (trans: Manheim, R. and Hull, R. F. C.).* Princeton: Princeton University Press

McKenna, Terence (1992): *The Archaic Revival: Speculations on Psychedelic Mushrooms, the Amazon, Virtual Reality, UFOs, Evolution, Shamanism, the Rebirth of the Goddess, and the End of History.* New York: HarperCollins.

Merleau-Ponty, Maurice (1964): *Signs (trans: McCleary, Richard C.).* Evanston: Northwestern University Press

Merleau-Ponty, Maurice (1968): *The Visible and the Invisible. Studies in Phenomenology and Existential Philosophy (ed.: Lefort, Claude; trans: Lingis, Alphonso).* Evanston: Northwestern University Press

Merleau-Ponty, Maurice (2006): *The Structure of Behavior (trans: Fisher, Alden).* Pittsburg: Duquesne University Press

Merleau-Ponty, Maurice (2010): *Phenomenology of Perception (trans: Smith, Colin).* New York: Routledge & Kegan Paul

Metzinger, Thomas (2010): *The Ego Tunnel: The Science of the Mind and the Myth of the Self.* New York: Basic Books

Moran, Dermot (2011): Sartre's treatment of the body in Being and Nothingness. The "double sensation". In: Boulé, J-P. and O'Donohoe, B. (eds.): *Jean-Paul Sarte: Mind and Body, Word and Deed.* Newcastle upon Tyne: Cambridge Scholars, pp. 9-26.

Moro, L. et al. (2011): Voice of the psychonauts: coping, life purpose, and spirituality in psychedelic drug users. *Journal of Psychoactive Drugs* 43: 188-198.

Morse, M. L. (1994): Near Death Experiences and Death-Related Visions in Children: Implications for the Clinician. *Current Problems in Pediatrics* 24: 55-83.

Nagel, Thomas (1974): What is it like to be a bat? *The Philosophical Review* 83: 435-450.

Nelson, Barnaby and Sass, Louis A. (2008): The Phenomenology of the Psychotic Break and Huxley's Trip: Substance Use and the Onset of Psychosis. *Psychopathology* 41: 346-355.

Otto, Rudolf (1958): *The idea of the Holy.* New York: Oxford University Press

Palmquist, Stephen R. (1993): *Kant's System of Perspectives: An architectonic interpretation of the Critical Philosophy.* Lanham: University Press of America

Palmquist, Stephen R. (2011): *Kant's Perspectival Solution to the Mind-Body Problem. – Or, Why Eliminative Materialists Must Be Kantians* – manuscript

Parnia, S. and Fenwick, P. (2002): Near death experiences in cardiac arrest: visions of a dying brain or visions of a new science of consciousness. *Resuscitation* 52: 5-11.

Pavol, M. A. et al. (1995): Pattern of neurobehavioral deficits associated with interferon alfa therapy for leukemia. *Neurology* 45: 947-950.

Quan, N and Banks, W. A. (2007): Brain-immune communication pathways. Brain, Behavior, Immunity 21: 727-735.

Raison, C. L. et al. (2006): Cytokines sing the blues: inflammation and the pathogenesis of depression. *Trends in Immunology* 27: 24-31.

Radley, A. R. (1984): The Embodiment of Social Relations in Coronary Heart Disease. *Social Science and Medicine* 19: 1227-1234.

Ramos, Denise G. (2004): *The Psyche of the Body. A Jungian Approach to Psychosomatics.* New York: Brunner-Routledge

Reich, Wilhelm (1970): *The Mass Psychology of Fascism.* New York: Farrar, Straus and Giroux

Reich, Wilhelm (1973a): *The Function of the Orgasm.* New York: Farrar, Straus and Giroux

Reich, Wilhelm (1973b): *Ether, God & Devil* and *Cosmic Superimposition.* New York: Farrar, Straus and Giroux

Reich Rubin, Lore (2003): Wilhelm Reich and Anna Freud: His expulsion from psychoanalysis. *International Forum of Psychoanalysis* 12: 109-117.

Revonsuo, Antti (2010): *Consciousness: The Science of Subjectivity.* New York: Psychology Press

Rock, A. J. and Krippner, S. (2011): States of consciousness redefined as patterns of phenomenal properties: an experimental application. In: Cvetkovic, D. and Cosic, I. (eds.): *States of Consciousness: Experimental Insight into Meditation, Waking, Sleep and Dreams.* Berlin: Springer-Verlag, pp. 257-277.

Roseman, L. et al. (2014): The effects of psilocybin and MDMA on between-network resting state functional connectivity in healthy volunteers. *Frontiers in Human Neuroscience* 8: 204.

Rukgaber, Matthew S. (2009): "The Key to Transcendental Philosophy": Space, Time and the Body in Kant. *Kant-Studien* 100: 166-186.

Russell, Bertrand (1967): *The History of Western Philosophy.* New York: Simon & Schuster

Russel, Bertrand (1992): *A Critical Exposition of the Philosophy of Leibniz*. London and New York: Routledge

Sandison, R. and Whitelaw, J. (1957): Further studies in the therapeutic value of lysergic acid diethylamide in mental illness. *Journal of Mental Science* 103: 332-343.

Samuels, Andrew (1986): *Jung and the Post-Jungians.* London: Routledge

Sartre, Jean-Paul (1956): *Being and Nothingness (trans: Hazel E. Barnes)*. New York: The Philosophical Library

Sass, Louis A. (1992): *Madness and Modernism: Insanity in the Light of Modern Art, Literature, and Thought.* Cambridge: Harvard University Press

Schopenhauer, Arthur (1969): *The World as Will and Representation (two-volume set, trans: Payne, E. F. J.).* New York: Dover Publications

Schopenhauer, Arthur (2010): The World as Will and Representation (Vol. I.). In: Janaway, Christopher (ed. & trans.), Norman, Judith (ed. & trans.), Welchman, Alistair (ed. & trans.): *The Cambridge Edition of the Works of Schopenhauer*. Cambridge: Cambridge University Press

Schouls, Peter A. (1980): *The Imposition of Method.* New York: Oxford University Press

Schwyzer, Hubert (1997): Subjectivity in Descartes and Kant. *The Philosophical Quarterly* 47: 342-357.

Shell, Susan Meld (1995): *The Embodiment of Reason: Kant on Spirit, Generation, and Community.* Chicago: Chicago University Press

Shanon, Benny (2003): *The Antipodes of the Mind: Charting the Phenomenology of Ayahuasca Experiences.* New York: Oxford University Press

Shanon, Benny (2010): The epistemics of ayahuasca visions. *Phenomenology and the Cognitive Sciences* 9: 263-280.

Shapiro, Lawrence (2011): *Embodied cognition.* New York: Routledge

Shapiro, Lisa (2003): Descartes' Passions of the Soul and the Union of Mind and Body. *Archiv für Geschichte der Philosophie* 85: 211-248.

Shamdasani, Sonu (2003): *Jung and the Making of Modern Psychology.* Cambridge: Cambridge University Press

Shepherd, M. (1981): *Psychotropic drugs in psychiatry.* New York: Jason Aronson

Shushan, Gregory (2009): *Conceptions of Afterlife in Early Civilisations: Universalism, Constructivism and Near-Death Experience.* New York: Continuum

Sidoli, Mara (1993): When the meaning gets lost in the body: psychosomatic disturbances as a failure of the transcendent function. *Journal of Analytical Psychology* 38: 175-189.

Smith, Edward W. L. (2000): *The Body in Psychotherapy.* Jefferson: McFarland

Solomon, Hester McFarland (2003): Freud and Jung: an incomplete encounter. *Journal of Analytical Psychology* 48: 553-569.

Sternberg, E. M. (2006): Neural regulation of innate immunity: a coordinated nonspecific host response to pathogens. *Nature Reviews Immunology* 6: 318-328.

Störig, Hans J. (1985): *Kleine Weltgeschichte der Philosophie*. Stuttgart: Verlag W Kohlhammer

Strassman, Rick (2001): *DMT – The Spirit Molecule.* Rochester: Park Street Press

Sturm, Thomas and Wunderlich, Falk (2010): Kant and the scientific study of consciousness. *History of the Human Sciences* 23: 48-71.

Suarez, A. L. et al. (2012): Psychoneuroimmunology of psychological stress and atopic dermatitis: pathophysiologic and therapeutic updates. *Acta Dermato-Venereologica* 92: 7-15.

Sullivan, M. (1986): In What Sense is Contemporary Medicine Dualistic? *Culture, Medicine and Psychiatry* 10: 331-350.

Suvisaari, J. and Mantere, O. (2013): Inflammation theories in psychotic disorders: a critical review. *Infectious Disorders Drug Targets* 13: 59-70

Szabo, Attila and Rajnavolgyi, Eva (2013): The Brain-Immune-Gut Triangle: Innate Immunity in Psychiatric and Neurological Disorders. *Current Immunology Reviews* 9: 241-248.

Szabo, Attila et al. (2014): Psychedelic N,N-dimethyltryptamine and 5-methoxy-N,N-dimethyltryptamine modulate innate and adaptive inflammatory responses through the sigma-1 receptor of human monocyte-derived dendritic cells. *PLoS One* 9(8):e106533.

Szabo, Attila (2015a): Psychoneuroimmunology and the embodied mind. *Lege Artis Medicinae* 25: 445-453.

Szabo, Attila (2015b): Psychedelics and Immunomodulation: Novel Approaches and Therapeutic Opportunities. *Frontiers in Immunology* 6: 358.

Szabo, Attila and Frecska, Ede (2016): Dimethyltryptamine (DMT): a biochemical Swiss Army knife in neuroinflammation and neuroprotection? *Neural Regeneration Research – accepted for publication, in press*

Szummer, Csaba (2010): Az LSD es a transzcendens elmenyek. *Addiktologia* 8: 68-76. [http://www.addiktologia.hu/article_pdf/245.pdf]

Szummer, Csaba (2011a): A pszichedelikus elmeny pszichologiai megkozelitesei: James, Maslow es a transzperszonalis pszichologia. *Lege Artis Medicinae* 21: 404-408.

Szummer, Csaba (2011b): A fenomenologia varatlan felbukkanasa az ezredfordulo megismeres-tudomanyaban. *Magyar Filozofiai Szemle* 2: 141-163.

Szummer, Csaba (2012a): Pszichedelikumok es kvazi-misztikus elmenyek. *Lege Artis Medicinae* 22: 154-157.

Szummer, Csaba (2012b): A pszichedelikumokban rejlo veszelyek és lehetosegek. *Lege Artis Medicinae* 22: 164-167.

Tagliazucchi, E. et al. (2014): Enhanced repertoire of brain dynamical states during the psychedelic experience. *Human Brain Mapping* 35: 5442-5456.

Thompson, Evan (2007): *Mind in Life – Biology, Phenomenology and the Sciences of Mind.* Cambridge: The Belknap Press

Tresan, David I. (2004): This new science of ours: a more or less systematic history of consciousness and transcendence. Part I. *Journal of Analytical Psychology* 49: 193-216.

Trichter, Stephen (2010): Ayahuasca beyond the amazon: the risks and benefits of a spreading tradition. *Journal of Transpersonal Psychology* 42: 131-148.

Ullmann, Tamas (2010): *A Lathatatlan Forma.* Budapest: L'Harmattan

Ullmann, Tamas (2012): Fantazia es intencionalitas. In: Ullmann, Tamas: *Az ertelem dimenzioi.* Budapest: L'Harmattan, pp. 125-149.

Van Lommel, P. et al. (2001): Near-death experience in survivors of cardiac arrest: a prospective study in the Netherlands. *Lancet* 358: 2039-2045.

Van Tellingen, C. (2008): Heaven can wait - or down to earth in real time: Near-death experience revisited. *Netherlands Heart Journal* 16: 359-362.

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

Varela, Francisco (1996): Neurophenomenology. A methodological remedy for the hard problem. *Journal of Consciousness Studies* 3: 330-349.

Vollenweider, F. X. and Kometer, M. (2010): The neurobiology of psychedelic drugs: implications for the treatment of mood disorders. *Nature Reviews Neuroscience* 11: 642-651.

Walburn, J. et al. (2009): Psychological stress and wound healing in humans: a systematic review and meta-analysis. *Journal of Psychosomatic Research* 67: 253-271.

Walsh, R. and Grob, C. S. (2005a): Psychedelics and the western world: a fateful marriage. In: Walsh, R. and Grob, C. S. (eds.): *Higher Wisdom: Eminent Elders Explore the continuing Impact of Psychedelics.* New York: State University of New York Press, pp. 1-7.

Walsh, R. and Grob, C. S. (2005b): The high road: history and hysteria. In: Walsh, R. and Grob, C. S. (eds.): *Higher Wisdom: Eminent Elders Explore the continuing Impact of Psychedelics.* New York: State University of New York Press, pp. 7-21.

Walsh, R. and Grob, C. S. (2005c): Consclusion: what did these elders learn, and what can we learn from them? In: Walsh, R. and Grob, C. S. (eds.): *Higher Wisdom: Eminent Elders Explore the continuing Impact of Psychedelics.* New York: State University of New York Press, pp. 251-259.

Weng, Helen Y. et al. (2013): Compassion Training Alters Altruism and Neural Responses to Suffering. *Psychological Science* 24: 1171-1180.

Wenzlaff, R. M. and Wegner, D. M. (2000): Thought suppression. *Annual Review of Psychology* 51: 59-91.

Wicks, Robert J. (2008): *Schopenhauer.* Oxford: Wiley-Blackwell

Wicks, Robert J. (2011): Arthur Schopenhauer. In: *Stanford Encyclopedia of Philosophy* (online version). Link (retrieved on: 1st february 2015.): http://plato.stanford.edu/entries/schopenhauer/

Wilson, Catherine (2012): Leibniz's Influence on Kant. In: *Stanford Encyclopedia of Philosophy* (online version). Link (retrieved on: 17th january 2015.): http://plato.stanford.edu/entries/kant-leibniz/#4

Winkelman, Michael (2002): Shamanism as neurotheology and evolutionary psychology. *American Behavioral Scientist* 45: 1875-1887.

Winkelman, Michael (2010): *Shamanism: A Biopsychosocial Paradigm of Consciousness and Healing.* Oxford: Praeger

Winkler, P. and Csemy, L. (2014): Self-experimentations with psychedelics among mental health professionals: LSD in the former Czechoslovakia. *Journal of Psychoactive Drugs* 46: 11-19.

Winnicott, D. W. (1959): The fate of the transitional object. In: Winnicott, C., Sheperd, R. and Davis, M. (eds.): *Psychoanalytic Explorations.* Cambridge: Harvard University Press

Yardley, L. (ed.) (1997): *Material Discourses of Health and Illness.* London: Routledge

Zahavi, Dan (2003): *Husserl's Phenomenology.* Stanford: Stanford University Press.

Zahavi, Dan (2004a): Back to Brentano? *Journal of Consciousness Studies* 11: 66-87.

Zahavi, Dan (2004b): Phenomenology and the project of naturalization. *Phenomenology and the Cognitive Sciences* 3: 331–347.

* * *