Tampere University

Ville Räisänen

PSYCHEDELIC THERAPY

Naturalistic Mechanism Meets Buddhist Philosophy

Faculty of Social Sciences
Master`s Thesis
November 2024

ABSTRACT

Ville Räisänen: Psychedelic Therapy - Naturalistic Mechanism Meets Buddhist Philosophy
Master´s Thesis
Tampere University
Degree Program in Philosophy
November 2024

In recent decades second wave of psychedelic studies, or the so-called psychedelic renaissance, has gained a growing momentum. Despite the promise psychedelic therapy holds, there is no consensus yet on how it works, or what is the mechanism(s) of psychedelic therapy.

This study compares philosopher Chris Letheby`s theory of the naturalistic mechanism of psychedelic therapy with Buddhist philosophy and Vajrayana Buddhist mind training. Letheby`s theory starts from the notion that naturalism is true. From this follows that although empirical psychedelic studies reveal positive correlation between mystical or spiritual experiences and improved well-being, the real mechanism of psychedelic therapy doesn`t include any non-naturalistic metaphysical beliefs. However, Letheby admits that experience must have a central role in the mechanism of psychedelic therapy. But instead of forming non-naturalistic beliefs from the basis of mystical or spiritual experiences, improved well-being is caused by momentary disruption in the self-representation that gives patient a chance to see herself in a different way. Letheby argues that these changes can be explained by using ideas of computational theory of mind, representationalism, and predictive processing. However, this study argues that there is philosophical or epistemological confusion in the idea of connecting naturalism with representationalism and predictive processing.

On the other hand, there are obvious phenomenological similarities with mystical or spiritual experiences gained under psychedelics and experiences of Buddhist meditation or mind training practitioners and masters. This study argues that understanding Buddhist thought only makes sense if the practical soteriology of Buddhism, the liberation from suffering, is taken into account. From this follows that Buddhism and psychedelic therapy in general have a common aim. The study also argues that if Buddhist philosophy of mind is seen as an epistemological idealism, or more precisely as non-dualist phenomenology, instead of metaphysical dualism or idealism, it doesn`t hold non-naturalistic metaphysical beliefs. This non-dualistic phenomenology is evident especially in tantric Vajrayana Buddhism where the aim of mind training is to be liberated from suffering in one lifetime. Therefore, the need for belief in rebirth or reincarnation and mind/body dualism it seems to entail is not essential. However, this study suggests that psychedelic research would benefit from a broader view towards the nature of reality that comes from Buddhist Madhyamika philosophy and enactive thought.

Besides philosophical and theoretical issues, this study also contributes to practical discussion on the mechanism(s) of psychedelic therapy by arguing that better knowledge and understanding of Buddhist philosophy and practical know-how of Vajrayana Buddhist mind training could be beneficial to psychedelic therapy. Firstly, study shows that there is a historical and present-day connection with psychedelic use and serious Buddhist mind training, and psychedelics are used as a gateway to Buddhism and as an adjunct to Buddhist mind training. Secondly, study shows that Buddhist philosophy and experiential know-how of Vajrayana Buddhist mind training could help psychedelic therapy by understanding the significant role of insight or pointing to the nature of the mind have in Buddhist view of alleviating suffering.

Keywords: psychedelics, psychedelic therapy, naturalism, naturalistic mechanism of psychedelic therapy, spiritual, mystical, Buddhism, Vajrayana, self, suffering

USE OF AI IN THESIS

I have utilised AI tools in my thesis

- ☒ No
- ☐ Yes

The AI tools utilised in my thesis and their purposes are described below:

Names and versions of AI tools: [List all the AI applications and their versions used during your thesis process]

Purpose of using AI tools: [Provide a detailed explanation of the purpose and application of AI tools during your thesis process]

Sections where AI tools were used: [List all the steps and sections of your thesis where AI has been applied during your thesis process]

I acknowledge that I am fully responsible for the entire content of my thesis, including the parts generated by AI, and accept accountability for any violations of ethical standards in publications.

CONTENTS

1. INTRODUCTION

The topics of this study are psychedelic experience, mechanism of psychedelic therapy and Buddhist philosophy and meditation or mind training. The idea to this thesis took shape when I read Chris Letheby´s book *Philosophy of Psychedelics* (2021). In his book, Letheby (2021, 51) mentions that psychedelics can affect many aspects of self-consciousness, and so can also Buddhist meditation techniques. These two seem to have phenomenological similarities. When writing about knowledge by acquaintance and it´s possibility to produce facts, Letheby says:

> "…on the first count, those sympathetic to Buddhist ideas might be tempted to propose the two following candidates: 1) that the self does not exist, and 2) that there can be totally selfless states of phenomenal consciousness" (Letheby 2021, 181).

I hold sympathy for Buddhist ideas. I have practiced mainly Mahayana and Vajrayana Buddhist meditation and yoga techniques for about twenty years. However, at the time of writing this thesis, I was not a member of any Buddhist community officially or unofficially. Based on my reading of Buddhist philosophy and especially on my experience of regular and serious mind training, I argue that Letheby suggests misleading ideas. In this study I will give more accurate and nuanced picture of Buddhist philosophy and mind training.

The first main thing to bear in mind with Buddhism is that in Indian born thought, it is nearly impossible to separate philosophy and religion from each other. As philosopher Julian Baggini (2018, 327) points out, most important element of almost all Indian philosophy is soteriology, seeking salvation or liberation. My claim in this study is that the goal of Buddhist philosophy and mind training is to achieve alleviation or liberation from suffering (*p. dukkha, skt. duhkha, tib. sdug bsngal*)[1]. This is the soteriology of Buddhism, and it simply makes no sense at all to explore Buddhist thought without taking this into account. Therefore, Buddhist conception of non-self (*p. anatta, skt. anatman, tib. bdag med*) is not about propositional fact that self doesn`t exists or momentary experience of total loss of selfhood.

[1] Abbreviations: p. pali, skt. sanskrit, and tib. tibet.

The Pali language term *dukkha* is usually translated as suffering. Good other options are stress and unsatisfactoriness, but suffering is commonly and widely used. Therefore, I use it too. In Buddhism, suffering is seen to penetrate human life in physical, mental, and emotional or affective level. Suffering is experienced especially in sickness, aging, and death. It is therefore an unavoidable part of being human. (Buswell & Lopez 2014, 270-271.) I will come back to *dukkha* later many times, but first it is important to note that in this thesis suffering doesn`t mean a nihilistic or pessimistic view that everything is suffering, or that life is only suffering. Also, although physical pain can be categorized as a form of suffering, in this thesis suffering doesn`t mean pain that can arise for example from putting your hand into fire. Therefore, liberation from suffering does not mean that every conceivable form of pain is not experienced anymore.

The second main point to bear in mind is that Buddhism is not a "one thing", but a broad and evolving tradition that has many different forms. From all possible forms of Buddhist thought and mind training practice I chose Vajrayana Buddhism as my main topic for three reasons. Firstly, it is possible that historically in Vajrayana Buddhism psychedelics has been used, and it seems that there is also connection with psychedelic use and (especially Vajrayana) Buddhism today in the West. Secondly, if Buddhism is seen as a gradually evolving tradition, there is a case to be made that Vajrayana Buddhism is both philosophically and practice vice the most developed form of Buddhism. Thirdly, my own practice history is mostly on Vajrayana Buddhism, so this is the tradition I am most familiar with.

Beside Buddhist philosophy and Vajrayana Buddhist mind training, I present Letheby`s naturalistic theory about the mechanism of psychedelic therapy. There are different opinions about the mechanism of psychedelic therapy, and there is no consensus yet. It is also possible that there are many mechanisms behind different forms of psychedelic therapy. However, Letheby (2021, 2-3) makes a general argument that psychedelic therapy improves well-being by disrupting the sense of self momentarily. This momentary disruption gives the patient a chance to see her life in a new way. Letheby calls his theory naturalistic because he argues there is no need for any non-naturalistic mystical or spiritual beliefs for the psychedelic therapy to work. In his view, all theories about the mechanism of psychedelic therapy that have non-naturalistic explanations are simply some kind of metaphysical hallucinations.

The aim of this study is to show that better understanding of Buddhist philosophy and Vajrayana Buddhist mind training could be beneficial to psychedelic studies and psychedelic therapy. Support for this aim comes through two-parted research question: what are the commonalities and differences between Letheby`s naturalistic mechanism of psychedelic therapy and Buddhist philosophy and Vajrayana Buddhist mind training? And how can Buddhist philosophy and Vajrayana Buddhist mind training help to guide psychedelic therapy?

In his theory, Letheby (2021, 5) claims that: "…the key causal factor in psychedelic therapy is genuinely psychological – an aspect of experience itself…". Furthermore, Letheby (2021, 82-92) identifies two psychological factors behind the positive effects of psychedelic therapy that are psychological insights and mindfulness-related capacities. I will later define what Letheby means by these. My claim is that the main forms of all Buddhist mind training called insight or pointing to the nature of the mind (*p. vipassana, skt. vipashyana, tib. lhag mthong*) and calm abiding (*p. samatha, skt. shamatha, tib. zhi gnas*) do remind these psychological factors, so there seems to be some similarity. After all, Western mindfulness derives from Asian born Buddhist meditation techniques. But on the other hand, there seems to be also some differences when Buddhist philosophy is studied more closely.

Today there is a tension in psychedelic studies between those who want to naturalise and demystify psychedelic studies (see: Sanders & Ziljmans 2021), and those who argue that psychedelic studies should embrace the study of mystical or spiritual experiences (see: Breeksema & van Elk 2021). Then there are also those who want to incorporate mysticism and spirituality in psychedelic therapy (see: McCarroll 2023). My claim in this thesis is that it is not clear that Buddhism is in contradiction with metaphysical naturalism. If the aim of Buddhist philosophy and practice is to alleviate suffering and be liberated from suffering, I don`t see an overwhelming reason why this can`t be achieved without non-naturalistic metaphysical beliefs. But I do not claim that there are no non-naturalistic beliefs in Buddhism, and my aim is not to try to naturalise Buddhism. However, I do argue that it is possible to see the metaphysical nature of Buddhist philosophy as a form of non-dual phenomenology. My hope is that seeing Buddhism this way makes it more plausible for those who hold more naturalistic view about reality, but doesn`t want to abandon or deny mystical or spiritual dimension of their lives.

Buddhism has a long and rich philosophical and practical history behind it. As Buddhism in its core is dealing with the liberation from suffering, it has created its own peculiar way to achieve this goal. Buddhists may sometimes say that there are two kinds of people: those who are Buddhists, and those who are "worldly". It is important to highlight that the term "worldly people" is not meant to be pejorative. (Smith 2023.) One way to understand this division from Buddhist viewpoint is that if one feels happy enough (with one`s life), one may feel she doesn`t need Buddhist philosophy and mind training. But if one recognizes suffering and wants to alleviate it or to be liberated from it, then Buddhism can help. I think this is same with psychedelic therapy. Nobody comes to psychedelic therapy without wanting to get rid of suffering. Therefore, very broadly speaking, these two can be seen to share a common goal.

The structure of this thesis is as follows. In the second part I introduce four classical psychedelic substances, and one other substance that can cause psychedelic experiences. Then I present biological mechanisms of psychedelics and go through a little bit of early history of psychedelic use. After this I move into psychedelic experience. Firstly, I characterise some common features and types of psychedelic experiences. Then I define what the term psychedelic means and explain what set and setting means in the context of psychedelic studies. Secondly, I move into the most important form of psychedelic experience regarding this thesis called ego dissolution and define what it means. Then with the help of three real life examples or "trip reports", I analyse further what ego dissolution is about.

Third part of this thesis begins with a short introduction to psychedelic therapy and its history. Then I present two different approaches of psychedelic therapy. After that I clarify what Letheby means with his philosophical view of naturalism and divide naturalism into methodological and metaphysical versions. Then I move into Letheby`s naturalistic mechanism of psychedelic therapy. I present different proposals or views for the mechanism of psychedelic therapy that Letheby rejects. Then I go through the main points of naturalistic mechanism of psychedelic therapy which consists of two psychological factors called psychological insights and mindfulness-related capacities, and computational theory of mind, representationalism, and predictive processing framework.

In the fourth chapter I firstly introduce some basic features of Buddhism and compare Buddhism to Christianity and science. Then I shortly go through Buddhist prehistory and present main teachings or doctrines that can be seen to be common for all Buddhists traditions and schools. Then I go into historical exposition of Buddhism. For this, I use the model of ”three vehicles” (Theravada, Mahayana, and Vajrayana) which is common but not only way to describe the historical evolution of Buddhism. Although this categorization is Asian in its origin and it helps to understand some broad differences in Buddhist doctrines, it is not without problems. As religious scholar Ville Husgafvel (2023, 53) points out, these three different “vehicles” are not fixed, exclusive, or comprehensive. In reality they are many times more complex. Admitting this, I do believe this categorization can be used to illustrate some important evolutions Buddhist thought has gone through.

After I have presented the main points of Buddhist doctrine and historical exposition, I introduce two basic maps of Buddhist mind training. Then I present in more detail a Vajrayana Buddhist mind training path from the viewpoint of the teachings called Mahamudra. In this part it becomes clear that in Buddhism philosophy and mind training can`t be separated from each other, and that philosophy always guides the mind training. Then I go into Buddhist philosophy of mind. Firstly, I categorize three basic metaphysical positions of Western philosophy of mind: materialism or physicalism, dualism, and idealism. Then I divide idealism into ontological and epistemological versions. Secondly, I compare Buddhist metaphysical views to Western metaphysical views. Thirdly, I move into phenomenology and present my idea that Buddhism can be seen as a form of non-dual phenomenology. Fourthly, I present my critique towards Letheby`s view of naturalistic mechanism of psychedelic therapy. In this criticism I argue that if representationalism and predictive processing framework is used in a naturalistic framework, these two seems to conflict each other.

In the fifth chapter I move into psychedelic Buddhism. Firstly, I present some evidence that psychedelic substances have been used historically in Indian religions and in Vajrayana Buddhism. I also show that modern Western Buddhism has connection to psychedelic use, and it is today connected to psychedelics maybe more than ever. Secondly, I move into more specific connections between Buddhist mind training and psychedelic experiences and present some evidence supporting the idea that psychedelics could be used beneficially alongside Buddhist mind training. Thirdly, I argue that there are some problems how Letheby presents mindfulness and then continue to critique mindfulness studies from three viewpoints that are metaphysical, scientifical, and related

to mind training. My main argument in this section is that if mindfulness is separated from Buddhist philosophy, it may lose its ability to alleviate suffering or liberate from suffering. Lastly, I present my view that Buddhist philosophy and mind training could be used as a guide for psychedelic therapy.

In the last sixth chapter I present my conclusions. Firstly, I answer my research questions and show how this study achieved its aims. Secondly, I present some limitations or weaknesses of my study and propose possible avenues for further research.

Bibliography of this thesis consists of philosophy, psychedelic studies, religious studies, mindfulness studies, and traditional Buddhist sources. Main references for the chapter on psychedelic substances, their biological mechanisms, and history are *Psychedelic Handbook* (2022) by medical doctor Richard Strassman, pharmacologist David Nichols`s article "Psychedelics" (2016), and Giorgio Samorini`s article "The Oldest Archeological Data Evidencing the Relationship of *Homo Sapiens* with Psychoactive Plants: A Worldwide Overview" (2019). Regarding the part on psychedelic experience and ego dissolution my main references are psychologist and philosopher William Richard`s and Albert Garcia-Romeu`s article "Current Perspectives on Psychedelic Therapy: Use of Serotonergic Hallucinogens in Clinical Interventions" (2018), Nour et. al. article "Ego-Dissolution and Psychedelics: Validation of the Ego-Dissolution Inventory (EDI)" (2016), scholar of psychedelic history and sociology Ido Hartogshon`s article "Constructing Drug Effects: A History of Set and Setting" (2017), *LSD My Problem Child* (2013) by chemist Albert Hofmann, and *How to Change Your Mind. What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence* (2018) by journalist Michael Pollan.

Main references for the part on psychedelic therapy and it`s naturalistic mechanism are *Philosophy of Psychedelics* (2021) by philosopher Chris Letheby and *LSD Psychotherapy* (1980) by psychiatric Stanislav Grof. Regarding the part on criticism towards Letheby`s naturalistic mechanism of psychedelic therapy, main references are philosopher Dan Zahavi`s article "Brain, Mind, World: Predictive Coding, Neo-Kantianism, and Transcendental Idealism" (2018) and *The Blind Spot: Why Science Cannot Ignore Human Experience* (2024) by astrophysicist Adam Frank, physicist and astronomer Marcelo Gleiser, and philosopher Evan Thompson.

Going into Buddhism, my choices of references are more varied because of two reasons. Firstly, as Husgafvel (2023, 35) points out, one cannot have comprehensive account of religion by only focusing on scriptures of that tradition, but one must still ground the understanding of actual practices to the scriptures of those traditions. Secondly, in order to really understand the viewpoint of experiential mind training, there has to be sources that have participated in the mind training, and not only sources that have learned the conceptual framework about the practices. Therefore, I have chosen to include references from inside the Buddhist tradition besides academic philosophy and religious studies. I also use my own experience of twenty years of serious Buddhist mind training as one reference, although I don`t claim things only through my own experience: I back them up with traditional sources. It is important to note that I do not read or write Pali, Sanskrit, or Tibetan languages. All my traditional sources are written in English, but they do originate from recognized and established Buddhist teachers, scholars, and meditation masters.

Most important references for the part on Buddhist history and philosophy are *A Companion to Buddhist Philosophy* (2013), edited by philosopher Steven Emmanuel, *The Princeton Dictionary of Buddhism* (2014) by professor of Buddhist studies Robert Buswell and professor of Buddhist and Tibetan studies Donald Lopez, *The Embodied Mind* revised edition (2016) by biologist, neuroscientist, and philosopher Francisco Varela, professor of psychology Eleanor Rosch, and Evan Thompson, *Nonduality in Buddhism and Beyond* (2019) by philosopher and Mahayana Buddhist (zen) teacher David Loy, and *The Universe in a Single Atom. The Convergence of Science and Spirituality* (2005) by Buddhist teacher Dalai Lama.

Regarding the part on Buddhist mind training, most important reference is *Wild Awakening. The Heart of Mahamudra and Dzogchen* (2003) by Buddhist scholar Dzogchen Ponlop Rinpoche. References for the connection between Vajrayana Buddhism and psychedelics are mainly from *Secret Drugs of Buddhism. Psychedelic Sacraments and the Origins of the Vajrayana* (2019) by Buddhist teacher and translator Mike Crowley, *Zig Zag Zen. Buddhism and Psychedelics* (2015) edited by Allan Badiner and *Altered States. Buddhism and Psychedelic Spirituality in America* (2016) by religious scholar D. E. Osto.

2. PSYCHEDELIC SUBSTANCES AND PSYCHEDELIC EXPERIENCE

There is no clear and agreed classification of psychedelic substances. Different substances may be called psychedelic depending on the context. Usually in psychedelic studies, four substances are classified as *classic psychedelics*. In this thesis I only introduce those classic psychedelics and one exception. I do this because: 1) Letheby uses only four classic psychedelic substances in his theory of the naturalistic mechanism of psychedelic therapy, and 2) beside some of the classic psychedelics and one exception, other substances doesn`t have relevance to the claim that psychedelics have been used historically in Vajrayana Buddhism.

The four classic psychedelics are LSD (*lysergic acid diethylamide*), DMT (*N,N-dimethyltryptamine*), psilocybin, and mescalin (Letheby 2021, 9). These substances can be divided into two groups of chemical compounds that are tryptamines and phenethylamines. LSD, DMT, and psilocybin are tryptamines, and mescalin is a phenethylamine. Some scholars may classify LSD as an ergoline which is a more complex chemical category, but tryptamine can be seen in the LSD molecule. (Strassman 2022, 19.) The fifth psychoactive substance that has a role in this thesis is a mushroom called fly-agaric (*Amanita muscaria*). I describe fly-agarics chemistry, biological mechanisms, and history in the next chapter. From now on in this thesis, the term psychedelics means the four classic ones only, and not for example substances like ketamine or MDMA (ecstasy).

2.1 BIOLOGICAL MECHANISMS AND HISTORY OF PSYCHEDELICS

Most important molecular mechanism of psychedelics is the agonist or partial agonist activity at the serotonin 5-HT2A receptor. This activity is usually seen to be necessary for psychological effects. However, it may not be sufficient to explain qualitative differences of experience between different substances. (Nichols 2016, 280.) Besides this, psychedelics also have influence on a hormonal level and hold potent neuroendocrine effects. For example, studies have shown that DMT can elevate blood levels of cortisol that is sometimes called stress hormone. DMT also effects adrenocorticotrophic hormone which stimulates cortisol release, and growth hormone and beta-endorphins, which can be involved in pleasurable psychological effects. (Strassman 2022, 62.) Psychedelics also have effects on organism`s immune system. Some studies suggests that psychedelics may have powerful anti-inflammatory qualities. (Strassman 2022, 67-68.)

At the level of the physical body, psychedelics increases pupil diameter, heart rate, blood pressure, and body temperature. However, psychedelics are physically very safe. They do not increase the body temperature to dangerous levels, and only in the cases of snorting, smoking, or injecting short-acting tryptamines like DMT, the rise of heart rate can become dangerous for those with heart disease. Sometimes psychedelics cause nausea or vomiting, but this is usually short-lived. (Strassman 20-21.) All psychedelics are physically nontoxic. There are no known deaths with pure psychedelic compounds. There is also no evidence that psychedelics cause brain damage or other neurological adverse effects. (Strassman 2022, 41.) Next, I move from chemical definition and biological and physical effects to see where psychedelics come from and what is their early history.

The usage of ”magic mushrooms” that contain psilocybin, cactuses that contain mescalin, and plants that contain DMT is very old. Oldest indirect evidence of human use of magic mushroom comes from 6000bc Sahara region. Indirect evidence means either anthropological, iconographical, or literal evidence. (Samorini 2019, 64-65.) Use of magic mushrooms was especially common in pre-Columbian Mesoamerican societies (Nichols 2016, 268). For example, Aztecs had a name for the magic mushrooms: *teonanacatl*, which means ”mushroom of the gods”. Different species of mushrooms that contain psilocybin are known at least two hundred different kinds. Today these mushrooms grow almost all over the world. (Strassman 2022, 102-104.)

Cactuses that contain mescaline called Peyote (*Lophophora williamsii*) and San Pedro family have been used mainly by Native North and South Americans (Nichols 2016, 268). Oldest direct evidence of human San Pedro use come from 8600bc region of Peru and oldest peyote use come from 3200bc present day area of Texas. Direct evidence means that there are either material, chemical, or genetical evidence. (Samorini 2019, 64-65.) There are many plants that contain DMT, but most common of them is *Psychotria viridis*. In the area of Latin America DMT has been historically ingested orally from a brew called ayahuasca, that is usually a combination of plants *Banisteriopsis caapi* and *Psychotria viridis*. Term ayahuasca comes from the language of Quecha and it means ”vine of the soul” or ”vine of the death”. (Strassman 2022, 106-107.) The oldest direct evidence of the use of snuff called *Anadenanthera* that contains tryptamines comes from 2100bc area of Argentina (Samorini 2019, 64-65, 73).

LSD is the youngest of psychedelics and its history is quite different compared to other psychedelics that are found in nature. LSD was discovered by Swiss chemist Albert Hofmann (1905-2008), and it comes from ergot that is produced by a fungus called *Claviceps purpurea*. This fungus grows parasitically on rye and some other species of cereals and grasses. In 1930s scientists isolated and characterized the nucleus common to all ergot alkaloids and named it lysergic acid. (Hofmann 2013, 10-13.) In 1938, Hofmann produced the twenty fifth substance of the series lysergic acid derivatives which was named lysergic acid diethylamide, LSD-25 (Hofmann 2013, 15). However, usage of ergot has a much longer history. Oldest direct evidence of human ergot use comes from 300bc area of Spain (Samorini 2019, 64-65). It is possible that ergot was also used in Ancient Greece, where lived a tradition of mystery cults. Foremost of these cults was the Eleusinian mysteries. These mysteries included a potion called *kykeon* that was drunk by participants. It is possible that *kykeon* contained ergot, and therefore caused psychedelic experiences to those who participated in these mysteries. (Strassman 2022, 99.)

Lastly, I shortly define the fly-agaric mushroom. The oldest indirect evidence of human usage of fly-agaric come from 1500bc Asia (Samorini 2019, 64-65). It is well known that fly-agaric has psychoactive properties, and for example native peoples in Siberian Kamchatka area has been using fly-agarics for a long time. However, differentiating from classic psychedelics, fly-agaric is toxic and consuming it can lead to serious poisoning or even death. The chemical substances that are the main reason for the psychoactive effects of fly-agaric are Ibotenic acid that acts as a non-selective glutamate receptor agonist, and muscimol that acts as a selective GABA agonist. But there are also many other known chemical substances in fly-agaric that may tribute to the psychoactive effects. (Patocka & Kocandrlova 2017, 123-127.) Fly-agaric has been more natural to the northern hemisphere of the earth, but today it grows almost all around the world. Those people who are using fly-agaric for psychoactive purposes knows that one way to lessen the toxicity of the mushroom is parboiling it. But in the earlier times, there was also other ways to lessen the toxicity of the mushroom that I will explore later.

2.2 NATURE OF PSYCHEDELIC EXPERIENCE

In previous chapter psychedelics were classified through their chemical composition, molecular mechanisms of action, and physiological effects. This is a popular way to classify psychedelics in psychedelic studies. But there is also another way to classify substance as psychedelic, and that is through the experience the substance causes. In this way the phenomenology of the experience dictates what is a psychedelic substance and what is not (see: Sjöstedt-Hughes 2023, 9). However, this alternate definition of psychedelics raises an obvious question: what kind of experiences are psychedelic experiences?

The above presented question is not easy to answer, because psychedelics affect and alter its user`s perceptions, feelings, thoughts, and body sensations in many different ways. For example, in the case of visual experience, colours can (and usually do) appear brighter and more vivid. Psychedelics can also cause many kinds of altered perceptions like geometric, caleidoscopic colourful patterns that can be seen with open eyes or eyes closed. Also common are changes to spatial and temporal perception. Feelings can be dramatically enhanced or completely disappear. Thinking may become very clear and fast or extremely confused. Sensing the body may distort in a way that the body feels extremely small or large. Sometimes user may also completely lose the sensation of the physical body. (Strassman 2022, 21-24; Letheby 2021, 41-43.)

Then, different types of experiences that psychedelics can cause include emotional recollection on significant life events, re-emergence of harbouring guilt or sorrow, grief for lost relationships, and anger or forgiveness regarding some unresolved traumas. On a more cognitive level problem solving, novel perspective taking, and creativity may be enhanced under psychedelics. There can also be challenging experiences which are in colloquial language called “bad trips”. These can include feelings of intense anxiety, panic, paranoia, and even fear of insanity or death. (Garcia-Romeu & Richards 2018, 302-303.) But besides categorizing how psychedelics can affect its user, there is also a different way to think about the psychedelic experience. In the next chapter, taking into account the aim of my study, I present two most important ideas how specific form of psychedelic experience can be seen and analysed. These are: 1) psychedelic experience as mind revealing, and 2) psychedelic catalysed ego dissolution.

2.3 MIND REVEALING EGO DISSOLUTION

Nowadays in colloquial language term psychedelic means different things. But originally the term was invented by a British born psychiatric Humphry Osmond (1917-2004) together with writer and critic Aldous Huxley (1894-1963). Psychedelic comes from the Greek words mind (*psyche*) and visible (*delos*), and it means to make mind visible or mind manifesting. (Nichols 2016, 266; Hoffman 2013, 42.) Term psychedelic was used first time in an academic context in Osmond`s article ”A Review of the Clinical Effects of Psychotomimetic Agents” (1957). In this article Osmond suggests a new name, psychedelic, for the formerly known psychotomimetic substances.

Psychotomimetic means a belief that psychedelics cause a psychotic state to its users that resembles schizophrenia. This framework of psychotomimesis was largely believed by psychedelic researchers during the 1950s. However, the real evidence about the relationship between psychosis and psychedelics is inconclusive. Despite this, there is some research that continue in the psychotomimetic framework. (Strassman 2022, 26-28.) Osmond argued in his abovementioned article, that the most important feature of the psychedelics was not their ability to mimic mental illnesses. He thought that although psychiatrist`s primary interest was psychotomimesis at that time, this shouldn`t be the only framework where psychedelics must be studied. Osmond argued that psychedelics have important social, religious, and philosophical implications. (Osmond 1957, 418-420.)

Osmonds main reasons for the use of the term psychedelic was that he thought too much emphasis on behaviourism and reductionism, and general lack of sharp observation of experience in psychological research, has made the research inadequate. He argued that if we do not understand the (exceptional) psychedelic experiences, then we can`t really understand the mind. Therefore, limiting psychedelic research only to psychotomimesis framework would be an error. (Osmond 1957, 427-432.) Psychedelic research nowadays have largely adopted use of the term psychedelic. Following Osmonds suggestion it is possible to see psychedelic experience as an experience that reveals the mind. Next I present and analyse the latter part of the heading of this chapter.

The experience of ego dissolution, or sometimes also called ego death, ego loss, or ego disintegration, can be simple defined as a compromised sense of self. Ego dissolution is usually seen to be closely related to mystical or spiritual experiences, but it can also be seen as a feature of psychosis. In the mystical or spiritual sense, the experience of ego dissolution is usually welcomed. For example, "father of modern psychology" William James identified ego dissolution in his book *The Varieties of Religious Experience* (1902) as an important feature of mystical or spiritual experience. In the psychosis sense, ego dissolution is seen as a form of self-disturbance and disturbed ego-boundaries that are linked to some mental disorders. Through empirical studies, the experience of ego dissolution is today seen as a central component of psychedelic experience. (Nour et. al. 2016, 2.)

Nour et. al. (2016, 2) claims that if ego dissolution is seen as positive and welcomed, or as negative and rejected, can depend largely on set and setting. To understand what this means, let`s clarify what set and setting are. In psychedelic studies set means all elements that are internal to psychedelic user. These include mental and physical health, the user`s persona, mental preparation for the upcoming experience, and all expectations and intentions towards the psychedelic experience. Setting on the other hand means all external elements which include physical, social, and cultural environment where the psychedelic experience happens. (Hartogshon 2017, 1-3; Strassman 2022, 16-17.) Historically terms set and setting came to scholar`s vocabulary from the work of somewhat controversial American psychologist and author Timothy Leary (1920-1995). The first publication where these terms were used was a text from year 1961 that was presented in the American Psychological Associations yearly meeting. (Hartogshon 2017, 2.) However, if we look beyond these technical terms, the actual ideas of set and setting are much older. For example, some native shamans are known to be very skilled in using different aspects of set and setting in their rituals. (Hartogshon 2017, 3.)

When these two aspects, mind revealing and ego dissolution are put together, we have an idea that psychedelics can reveal something about the mind that includes the ego or the self: mind revealing ego dissolution. To get a better sense what this can mean, next I present three real life examples or "trip reports" of ego dissolution under psychedelics. In these stories are featured also many other common features of psychedelic experience besides ego dissolution. After the reports I analyse the different verbal expressions of ego dissolution and clarify why set and setting seem to be important feature of ego dissolution in axis of positive versus negative.

2.4 THREE EXAMPLES OF EGO DISSOLUTION

First example is probably the first ever LSD trip made by Albert Hofmann. In 1943 Hofmann synthesized LSD in his laboratory and got some of it into his body through his fingertips. After working day Hofmann felt he entered into a slightly drunken and dreamlike state, where he saw some caleidoscopic patterns when his eyes were closed. This incident woke up his interest towards the substance and he planned a test for himself. Hofmann decided to take the smallest possible dose of LSD that he thought could have some kind of effect on him. This dose was 250 micrograms. (Hofmann 2013, 18-19.) From today´s perspective dose may seem quite large, but at that time Hofmann made a very reasonable guess.

In less than two hours after orally ingesting the 250 micrograms of LSD with water, Hofmann felt barely able to speak or write. He asked his laboratory assistant to escort him home by bike. During the bike ride everything in Hofmanns vision started to waver and distort. After getting home Hofmann asked for a doctor and lied down to the sofa. Now he´s outer world started to transform in a terrifying manner. The whole room spun around, and familiar objects became grotesque, threatening, and seemed to be in constant motion. But even worse than the changes in the outer world were the changes in the inner world. (Hofmann 2013, 19-20.) Hofmann describes how:

> ”…every exertion of my will, every attempt to put an end to the disintegration of the outer world and the dissolution of my ego, seemed so much wasted effort. (…) The substance with which I had wished to experiment, had vanquished me.” (Hofmann 2013, 20.)

Hofmann feared that he was going to die. He felt he was taken into another world, another time, and he also saw he`s own body as lifeless. However, after some hours he felt that the climax of the experience passed away. Thoughts of becoming mad faded and was replaced by feelings of great fortune and immense gratitude. Later doctor arrived, examined Hofmann and couldn`t find any physiological abnormalities beside the dilated pupils. Next morning Hofmann describes feeling refreshed and clear headed, sensing well-being and renewed life. Breakfast tasted delicious and gave him extraordinary pleasure. (Hofmann 2013, 20-22.)

Second ego dissolution example comes from Michael Pollans bestseller book *How to Change Your Mind* (2018). In it Pollan also writes about his own trips. Probably most interesting one for the viewpoint of this study is his encounter with psilocybin. In the trip report he describes:

> ”I watched as that familiar self began to fall apart before my eyes, gradually at first and then all at once. “I” now turned into a sheaf of little papers, no bigger than Post-its, and they were being scattered to the wind. But the “I” taking in this seeming catastrophe had no desire to chase after the slips and pile my old self back together. No desires of any kind, in fact. Whoever I now was was fine with whatever happened. *No more ego?* That was okay, in fact the most natural thing in the world.” (Pollan 2018, 263.)

Pollan continues to analyse he´s situation and ponders about the ego dissolution:

> “But who was this “I” that was able to take in the scene of its own dissolution? Good question. It wasn`t *me*, exactly. Here the limits of language become a problem. (…) For what was observing the scene was a vantage and mode of awareness entirely distinct from my accustomed self; in fact, I hesitate to use the “I” to denote the presiding awareness, it was so different from my usual first person.” (Pollan 2018, 263-264.)

Day after the psilocybin trip Pollan feels grateful about the ego dissolution experience and that he found the other vantage point, which he describes less neurotic and more generous. But Pollan also remarks that after twenty-four hours, his old self was back. He ponders about the usefulness of the glimpse he saw and comes to the realization, that maybe through meditation practice he could learn to relax the self`s reactions to other people and events. (Pollan 2018, 270-271.)

Third ego dissolution example comes from Mike Crowley`s book *Secret Drugs of Buddhism* (2019). In there is a trip report from a person called Steve E. Report is originally from the study made by University of Wisconsin called Pharmacokinetics of Psilocybin in Normal Adult Volunteers. In this study, Steve took a large 59 milligram dose of psilocybin. (Crowley 2019, 295).

Firstly, after taking the psilocybin, Steve describes how he felt like dying. How “Steve” was actually dead hundreds of times. After about four hours into the experience, Steve met a “boneman”, and then turned into this ”boneman” himself. Then he describes that:

> ”I entered a stateless state. This stateless state was one of authority. I was pure awareness, but there was no awareness. I was pure consciousness, but there was no consciousness. There was a sense of pure wisdom and knowledge, but there was no wisdom or knowledge. It was state of perfection, but there was no perfection. There was no desire. There was no emotion. There was no bliss. No oneness. No unity consciousness. There was nothing. This state was perfect state. This state, which was not a state, was above all.” (Crowley 2019, 296.)

At some point Steve got out of this perfect state, but then went back in:

> “But “I” was still experiencing this stateless state. There was no object of “me”. My attention then shifted and I was looking down on human suffering. Beneath me I could see the white ring to the portal of human suffering. There was no emotion, no feeling of compassion. It meant nothing. (…) It was above the entire realm of what we can experience as humans.” (Crowley 2019, 296.)

Although at a first glance, Steves story may sound very nihilistic and cold, this is not how he felt the experience was. Steve concludes his journey saying that:

> “Everything that I have suffered through to get me to the state (…) was worth it. I felt like those moments in that state were a culmination of my entire life. (…) To experience that state was the greatest gift and the most profound experience of my life. (…) It may sound nihilistic to be in such a state of indifference to the various modes of human consciousness. But the experience has left me a greater appreciation for all the nuances of my life. There is an intricately woven tapestry to our existence. A tapestry of pain, suffering, grief, joy, love, bliss, ecstasy, and thousands of

> variations of these potential aspects of human being. None of them are better or worse than other. They are all just "there" – there for us to experience, to feel. (…) Where we get lost is in the stories that we create. The meaning that we assign to our experiences. What I am learning is that "Nothing means anything" and conversely, "Everything means something." (…) It is not until we attach meaning to something that it exists as a story – a false story with no true meaning. Only a manifestation of the mind. We needlessly suffer based on attached meaning. The false reality we have created from thousands of stories that have no meaning. If we can dissolve to a state of no "I", there is no suffering, no attachment, no seeking, no searching. We simply exist in a state of present moment awareness where all is as it should be – the perfection of existence in the moment." (Crowley 2019, 297-298.)

Now, what seems to be the common characteristics of all three examples? It is very hard or maybe impossible to define exactly what ego dissolution means or could mean. But it is clear from reading the examples above that in every case the sense of self seems to undergo a (dramatic) change. In all of these examples this change is ultimately seen as a positive thing already during the experience, or at least in contemplation after the experience.

In the first example Hofmann was at first afraid of the ego dissolution. At some point he thinks he is going crazy, and he tries to fight against the power of the experience. I argue that this can be at least partially explained by set and setting. Hofmann didn`t have any idea what is going to happen before he took LSD. He had no idea what psychedelic experience could be, and he was not prepared for the intensity of the experience. His ego dissolution seemed to also include feeling of physical death. Who wouldn`t be horrified in this situation? However, in spite of all this, Hofmann seemed to eventually "learn" to enjoy the psychedelic experience and maybe even the ego dissolution when he was home in a secure environment, and doctor has stated that he was physically fine. Noteworthy is that one day after the trip Hofmann said he felt very positive about the experience he went through, although it was many times terrifying to him at the time it happened.

In the second example, it is clear that Pollan was much more prepared than Hofmann for his encounter with psychedelics. I believe he knew and properly understood the importance of set and setting, because he writes about them in his book. It is also possible, that he anticipated and even wanted the ego dissolution to happen. Interesting is also that Pollan describes the ego dissolution experience as feeling natural. He says that he didn´t felt any worry at all when he witnessed he`s sense of self disappearing. Pollan describes the ego dissolution like finding another mode of awareness that is totally different from the former "self-mode". So here, ego dissolution is characterized as a different mode of awareness. However, important remark that Pollan makes is that next day he recognizes that he has lost the other mode. The experience didn`t have a lasting effect. This is something that I will come back later when I analyse the difference between momentary experience and lasting insight.

In the third example, I believe that Steve E. was also well prepared for his experience, although the intensity of it may nevertheless have surprised him. He also seemed to understand the importance of set and setting because he had done psychedelics many times prior to this one (Crowley 2019, 295), and he was also in a clinical trial where, at least today, set and setting are usually regarded carefully. And it is also important to mention, that Steve E. uses Buddhist terms in his report, so he may already have some kind of Buddhist framework in his mind before the ego dissolution happened. Steve E. describes the ego dissolution in a way that he couldn`t find any object that is "me" in his awareness or consciousness. But he still refers to himself as "I", because in order to refer to himself, one must use something. He also uses many other paradoxes as means to explain how he felt. Noteworthy is that Pollan also complained about the inability of the language to describe the experience. Steve E. goes probably further than Pollan and Hofmann when describing the meaning of the experience, because he argues that the experience is the most important one in his whole life. This is interesting because as Pollan described, Steve E. also seems to be "out of the experience" after the influence of substance. Steve E. also says that if only human beings could be in that state of no "I" forever, without stories they create, then there would be no suffering.

Later in this thesis, I will use all these three reports to analyse differences and similarities between Buddhist philosophy and mind training and ego dissolution experiences. Next I move from the characterization and analyses of psychedelic experience and ego dissolution to Chris Letheby`s ideas about the mechanisms of psychedelic therapy.

3. THE NATURALISTIC MECHANISM OF PSYCHEDELIC THERAPY

In this third part I move from empirical reports into a more abstract philosophical domain. In first and second chapter I very briefly explore some history of psychedelic therapy and present two different approaches of psychedelic therapy. Then starting from the third chapter, I explore the Letheby`s naturalistic mechanism of psychedelic therapy. Firstly, I analyse what kinds of philosophical commitments and ideas Letheby endorse or hold in his theory. Secondly, I present other options for the mechanism of psychedelic therapy that Letheby explores in his book and rejects. Then in the last fifth chapter, I present the main points and ideas of Letheby`s theory of the naturalistic mechanism of psychedelic therapy.

3.1 HISTORY OF PSYCHEDELIC THERAPY

Academic psychedelic research can be divided into two phases. In the first phase from 1950s to 1970s, psychedelic research led psychiatry into so called “golden era of psychopharmacology”. Psychopharmacology means the study of how different substances affect brain chemistry, and how these chemical chances in the brain then affects the experience. (Strassman 2022, 7.) In this first phase it was already seen that psychedelic therapy can work in healing different kind of emotional disturbances and addictions. A large body of psychedelic research was done between 1950-70s, and there were about 40,000 individuals who had used LSD in these research studies (Garcia-Romeu & Richards 2018, 292). Also, two different approaches to psychedelic therapy were invented that are usually called psycholytic therapy and psychedelic therapy (Strassman 2022, 39-40). I will describe these approaches in the next chapter.

The first phase ended mainly because of 1960s cultural and social events in United States. These events led into a strict law concerning drugs called Controlled Substances Act (CSA). CSA pretty quickly extinguished almost all human studies with psychedelics (Strassman 2022, 15-16). However, today psychedelics are back. Many universities around the world now have their own psychedelic research centres. (Strassman 2022, 7.) In this second phase starting from 1990s, also called psychedelic renaissance, psychedelic studies include many psychological and physiological illnesses. Examples of these are addictions, depression, anxiety of dying, antisocial and other personality disorders, post-traumatic stress disorder, and eating disorders (Strassman 2022, 38).

Although it is generally accepted that psychedelics hold real promise for the treatment of many mental disorders, there are also worries about the quality of psychedelic research. For example, van Elk and Fried (2023, 1-2) argues that psychedelic research raises some concerns about the validity of the studies. Therefore, it casts doubt about the evidence these studies present. Because of this, it may still be premature to draw conclusions about the real efficacy and safety of psychedelic therapy. However, van Elk and Fried (2023, 19) does not want to stop psychedelic research. Instead, they proclaim strong caution regarding the hype around psychedelic renaissance. Their hope is that new, better-done studies will eventually find credible evidence that psychedelic therapy can become a useful tool for treatment of some mental disorders.

3.2 TWO APPROACHES OF PSYCHEDELIC THERAPY

Term *psycholytic* comes from the Greek word *lytic* which means dissolution. According to psychedelic research pioneer Stanislav Grof (1980, 31-42), the general aim of psycholytic therapy is to relieve the conflicts of the patients mind by freeing up tensions. In practice this means that patient gets something between 30-300 micrograms of LSD in many sessions. The number of sessions can range widely depending on the nature of the patient`s problem or therapeutic meaning. Garcia-Romeu and Richards (2018, 293-294) argues that psycholytic model can be described as means to facilitate psychotherapeutic process. For example, it allows greater access to unconsciousness, past traumas, and cathartic abreaction of emotionally charged material. According to Passie (2024, 1), psycholytic model was developed and practiced mainly in Europe. It was most widespread in 1960-70s, and from 1964-1974 there was a functioning European Medical Society for Psycholytic Therapy. The aim of this society was to bring together therapists who used LSD to enable professional exchange and to develop standards of psycholytic therapy.

However, Grof (1980, 35-36) argues that the more effective way of psychedelic treatment than psycholytic therapy is what he simple called psychedelic therapy. The aim of Grof`s version of psychedelic therapy is to create the experience of ego dissolution. In practice, psychedelic therapy uses different means to achieve a better probability of ego dissolution. Size of the LSD dose is usually pretty large, between 300-1500-micrograms, and there is always a preparation before the LSD session where therapist familiarises with patient`s individual history and helps patient to understand her symptoms and those things that can prevent her to achieve the ego dissolution. In

general, psychedelic therapy tries to transcend psychopathology and not to analyse it. Garcia-Romeu and Richards (2018, 294) describes the peak experience of ego dissolution as a basis for subsequent symptom release and behaviour change. Usually in psychedelic therapy the therapist mainly takes a non-directive approach to allow the unfolding of experience in a safe environment. According to Passie (2024, 1), psychedelic therapy has been mainly used in North America, and European therapists have historically mostly ignored this method.

Today there are many different forms of psychedelic therapies, but most of the therapy done mirrors the psychedelic therapy model. There are also studies where newer therapeutic models such as Cognitive Behavioural Therapy and Motivational Enhancement Therapy are incorporated into psychedelic therapy. (Garcia-Romeu & Richards 2018, 294-295.) However, as I already mentioned in the introduction, there is no widely accepted agreement on the mechanism of psychedelic therapy. For example, van Elk & Fried (2023, 13-14) argues that there is still a lack of strong empirical evidence for any possible mechanism. Taking into account the Buddhist side of this thesis, my claim is that the two forms of psychedelic therapy remind two forms of Buddhist mind training called calm abiding and insight or pointing to the nature of the mind. Psycholytic therapy seems to be more in line with calm abiding, and psychedelic therapy seems to align with pointing to the nature of the mind. I come back to this issue and explore it more in a chapter on psychedelic Buddhism, after the chapters on Buddhist philosophy and Vajrayana Buddhist mind training have been dealt with.

3.3 THE HARD PROBLEM OF CONSCIOUSNESS

In general, all forms of psychedelic therapy can be seen to have two parts: 1) drug use, and 2) psychotherapy. Letheby (2021, 1) argues that psychedelic therapy can be seen as a form of drug treatment, but comparing it to a normal drug treatment, it seems to have somewhat different nature. This is because in psychedelic therapy it is not clear that the drug is the direct cause behind the positive therapeutic effects. Instead, it seems like the drug acts only as a catalyst for intense experience that causes the positive effects. These intensive experiences that patients describe seems often mystical or spiritual. As an example, Letheby mentions the experiences of ego dissolution, cosmic consciousness, and all-encompassing unity.

In his theory of the naturalistic mechanism of psychedelic therapy, Letheby (2021, 30-31) starts from the assumption that a philosophical view called naturalism is true. Letheby (2021, 2-3) argues that all non-naturalistic beliefs that originate from mystical or spiritual experiences are only metaphysical hallucinations. These non-naturalistic beliefs do not reveal the true nature of reality, and these beliefs are not the real mechanism of psychedelic therapy. However, this strong philosophical commitment raises a question: what does naturalism mean?

Letheby (2021, 33-34) admits that naturalism is very hard to define. However, analysing naturalist view can start from dividing it into *methodological* naturalism and *metaphysical* naturalism. According to Letheby:

> "…methodological naturalists believe that philosophy is, or ought to be, continuous with natural sciences, and they reject the idea of "first philosophy" that could support an a priori critique of scientific method. Adherents of this view criticise armchair reasoning and pure conceptual analysis, insisting that philosophical conclusions must not only be consistent with, but based upon and integrated with, the best-supported theories in science." (Letheby 2021, 33.)

For methodological naturalist sciences are the best guide to find out what the world is really like (Letheby 2021, 34). On the other hand:

> "…metaphysical naturalism (…) also known as "ontological" or "philosophical" naturalism, is not a claim about how we should do philosophy but a claim about what exists. (…) Naturalistic philosophical accounts of mind do not (a) [allow] the existence of paradigmatically non-natural entities such as God, angels or Cartesian souls or non-natural properties, or (b) [treat] the world of nature as understood within the sciences as non-fundamental." (Letheby 2021, 34.)

Letheby (2021, 34) argues that metaphysical naturalism leads to physicalism. Physicalism is a more well-defined metaphysical view which claims that everything, also consciousness, thoughts, and perceptions, are wholly physical in character (Stoljar 2021). Letheby goes on to argue that:

> "…conscious experiences are simply identical, in some sense, to states or processes occurring entirely within the brain. (..) -even if the relevant states or processes are better characterized in functional than chemical or physiological terms." (Letheby 2021, 34-35.)

Aforesaid seems to suggest that beside methodological naturalism and physicalism, Letheby also endorses mind/body identity theory. This is an important point, and I will come back to it later. It is also important to highlight, that physicalism is a philosophical view. It is an interpretation of physics, and not a thesis that belongs to any theory of physics.

Well-known problem to all physicalist views about the world or reality is the hard problem of consciousness, ergo, how physical systems or things gives rise to subjective experience, and how to explain this in scientific terms. (Chalmers, 1995). Letheby (2021, 37-38) admits that there is no satisfying solution to the hard problem of consciousness. But he argues that even if the hard problem would never be solved, that doesn´t mean that physicalism is false. Letheby seems to think that since science has explained so much and have been so successful, it will one day also explain consciousness even if it may need some sort of conceptual leap to do it.

I argue that Letheby`s metaphysical position seems somewhat problematic. The claim that physicalism can still be true despite the hard problem of consciousness never becomes solved is acceptable. But it would be much easier to accept physicalism if the hard problem of consciousness had been solved. Science can explain many things and it has been successful, that is granted. But from this doesn`t follow that science can explain everything. However, things get more interesting and detailed when I present Letheby´s naturalistic mechanism of psychedelic therapy that includes predictive processing framework and other metaphysical views. I will come back to criticism of Letheby`s philosophical view in the chapter called predictive processing and phenomenology.

3.4 POSSIBLE MECHANISMS OF PSYCHEDELIC THERAPY

Although there is no general agreement on the mechanism of psychedelic therapy, there are many different proposals. Now it has become clear that there is a positive correlation between mystical or spiritual experiences and improved well-being (Letheby 2021, 62-63). One example of this is a meta-analysis showing connections between spiritual experiences, psychological insights, and emotional breakthroughs with improved well-being (see: Kangaslampi 2023). But there are also researchers who argue that psychedelic experience is not required for improved well-being. Their view is that mystical or spiritual experiences may very well contribute to therapeutic effects on well-being, but these experiences may not be necessary for positive effects. It is possible, for example, that only enhanced neural plasticity in the brain causes the therapeutic effects. (Olson 2021, 564). In favour of this "only neural plasticity" view, there exists one known case where a person who suffers from treatment-resistant depression used psilocybin and trazodone (potent 5-HT2A receptor antagonist) at the same time and therefore had no psychedelic experience, but still gained some antidepressant effects (Rosenblat et. al. 2023, 395).

One possible way to empirically test the abovementioned view that psychedelic experience is not necessary would be to give psychedelics for patients who are under general anesthesia (McIntyre 2023, 885-888; Olson 2021, 565). These kind of studies haven`t really been done yet but may very well be in the future. However, today there is no clear evidence suggesting that the experience would not be required for the efficacy of the psychedelic therapy (McIntyre 2023, 887). On the contrary, there are those who argue that neurobiological mechanisms are likely necessary, but not sufficient for improved well-being (Yaden & Griffiths 2021). Letheby (2021, 62-65) also argues that meaningful experiences must have a role in the mechanism of psychedelic therapy. But Letheby`s naturalistic conviction is that there are genuine mystical and spiritual experiences that trigger beliefs that do not include any non-naturalistic elements. Before I go into Letheby`s naturalistic theory, I will first explore two alternative views for the mechanism of psychedelic therapy.

First alternative view is that the positive outcome of psychedelic therapy results from the non-naturalistic beliefs about reality. Letheby (2021, 67-69) calls this theory a Metaphysical Belief Theory (MBT). According to MBT, spiritual and/or mystical experiences give a direct apprehension of the metaphysical nature of reality. These detailed and convincing spiritual and/or mystical

experiences are then followed by beliefs about the nature of reality. It is important to note that MBT is mostly an intuitive theory. It is not based on rational arguments, but on the power of the experience. A short example of MBT can be seen in the psychedelic study report from a person under influence of psychedelic substance who lost herself into a great feeling of unity, which then turned into a belief about the reality:

> "The complete and utter loss of self. (…) The sense of unity was awesome. (…) I now truly do believe in God as ultimate reality." (Letheby 2021, 69.)

Second alternative view is a somewhat lighter version of MBT called Metaphysical Alief Theory (MAT). The original developer of the idea behind *alief* is philosopher Tamar Gendler. Gendler (2008, 642) defines alief as a mental state, linked associatively to representational, affective, and behavioural content. Alief can be activated consciously or non-consciously and can be either occurrent or dispositional. In her article Gendler gives many real-life examples of people having an alief. One of them is a walk over Grand Canyon by a glass bridge. In this example she describes a situation where a woman going over the bridge grabs a safety person and a bridge railing but is still so afraid that can`t move at all (Gendler 2008, 634). Letheby (2021, 76-77) argues that in the abovementioned situation person believes in a reflective and rational level to be safe, but at the same time feels and acts like in danger. This person has an alief that she is unsafe. According to MAT, psychedelic therapy patient well-being is not enhanced by metaphysical beliefs but by metaphysical aliefs. However, problem here is that some psychedelic therapy patients do not report any non-natural metaphysical beliefs or aliefs at all, although their well-being is enhanced.

3.5 THREE FACTORS OF THE NATURALISTIC MECHANISM OF PSYCHEDELIC THERAPY

Because Letheby thinks that experience has a genuine or real role in the mechanism of psychedelic therapy and he is committed to naturalism, there must be some other psychological factors behind the mechanism than MBT and MAT. Again, based on empirical studies, Letheby (2021, 81-82) gives two psychological factors that are: 1) psychological insights, and 2) mindfulness-related capacities.

Letheby (2021, 81-82) defines these two factors in the following way. Psychological insights are focused on a narrative self and its´s changes, and mindfulness-related capacities are focused on disidentification and a gap between experienced self and other mental states. To get a better sense of what is meant with psychological insights and mindfulness, it is useful to define what Letheby means by narrative self and minimal self:

> "The narrative self is the rich and complex set of mental representations a person harbors of her identity over time, as a specific individual with an autobiographical history and a distinctive set of traits." (Letheby 2021, 84).

In another words, narrative self can be seen as a story that the person thinks about herself. Then, Letheby (2021, 87) defines minimal self as a bare sense of being a subject of experience, or a form of bodily awareness. This definition is not important to dive into more deeply here. The main claim Letheby (2021, 87) makes is that especially the disruption in the sense of narrative self allows a person to change how one sees herself, and how to understand her own mind and life in a new way. This seems pretty straightforward and clear. Changes in the narrative of how we see ourselves as individuals in a more positive way can increase our well-being. But what is not so clear is the mindfulness part. Taking mindfulness into picture, there arises connections to Buddhism and Letheby also recognizes this. I will come back to the relationship between Buddhism and mindfulness later many times.

Now two of three factors behind the naturalistic mechanism of psychedelic therapy have been presented. Letheby (2021, 82) argues that the third factor are the neural correlates of psychedelics. These correlates can be more closely located to a two brain networks called Default Mode Network (DMN) and Salience Network (SN). When the two psychological factors and neural correlates are put together, correlations between psychological effects and DMN and SNT can be found. Obvious problem here is that the causation between these factors is not yet shown. Despite this, Letheby (2021, 102) argues that it is possible to explain psychological phenomenon with a neuroscientific model. This model is based on a view of mind called Computational Theory of Mind (CTM).

CTM was originally born with the development of computers. From the advancements in computation came an idea of seeing the mind as a computational system. However, CTM does not claim that mind is literally a computer. (Rescorla 2020.) According to Letheby (2021, 102-103), CTM proposes that mind is a computational system in a biological brain and that it revolves around two main ideas. Firstly, brain states can be understood as mental representations of an inner and outer world of the organism. By representation Letheby means it in the most general sense as something that *stands in for* something. For example, portrait of a person stands in for the person itself. Secondly, neurally implemented cognitive processes are those that manipulate these representations forming meaning or content out of them. As an example of this process, Letheby gives the following description:

> ”A perceptual (auditory) representation of a knock at the door causes the generation of a representation with semantically related content along the lines *who is at the door.* An interoceptive representation of the sensation of hunger causes the generation of a representation with content along the lines of *is it nearly lunchtime yet?*” (Letheby 2021, 103.)

Now that the basic idea of representation is demonstrated, let´s see how Letheby defines the mechanism of psychedelic therapy:

> “…the central mechanism of psychedelic therapy is the disruption and subsequent revision of mental representations of the self.” (Letheby 2021, 81.)

Letheby (2021, 110) claims that psychological and neuroscientific factors on the changes in the self representation can be united with a model he calls predictive self-binding. This model is based on the theory or framework of *predictive processing.* Predictive processing is a computational model, which aims to be a general framework that could describe all perception, action, and cognition in a conceptually unified manner. It is important to note here, similarly as in the case of CTM, that predictive processing is not a neurobiological model. (Wiese & Metzinger 2017, 2.)

According to Wiese and Metzinger (2017, 3), predictive processing has seven central ideas that make it up. First idea is a strong emphasis on top-down processing. This means that prior knowledge (priors), for example in the case of perception, is pervasive feature of perception that happens all the time. Second idea is that the brain forms statistical estimations as representations of what is out there in the world. Third is that these estimates are hierarchically organized. Fourth is that the brain uses representations to predict current and future sensory input. Fifth is that mismatch between predictions and sensory input results in updates to representations. Sixth is that the goal of these updates is to minimize the prediction error. Seventh is that all updates conform to the norms of Bayesian inference. (Wiese & Metzinger 2017, 3-4.) In other words, Letheby (2021, 113-114) explains the predictive processing framework:

> "…in predictive processing brains can be seen as a machine that makes predictions. Then this machine builds a hierarchical model of inner and outer world in order to predict all the upcoming inputs that it will receive. All incoherence between predictions and inputs will either result in the change on the hierarchical model or change in the behaviour of the organism in a way that tries to change the target of the input. So, the meaning of the brain is to minimize incoherence by optimizing the predictions that it constantly makes." Letheby (2021, 114.)

One of the commonly known problems in neuroscience is the so-called binding problem. This problem can be formulated with a question: how does processing of sensory data that is known to be spread into the different regions of the brain can construct an undivided subjective experience that includes a meaningful target? Letheby (2021, 126-129) argues that the solution to binding problem is predictive binding. According to the principles of predictive processing, perception begins from the top of the hierarchy. With priors, brain binds objects from the sense data. As an example, Letheby explains when a person sees the wings of a seagull, the whiteness of it, movement and place of it, the predictive binding explains how these different perceptions become a unified experience of a seagull. This same predictive binding happens for the sense of self, albeit self is a much more complicated occasion. This is because self is a different kind of object than a seagull. Neuroscientist Anil Seth (2021, 147), who also advocates the predictive processing, describes the self as a one special form of perception among all other perceptions.

This abovementioned description is also interesting from the Buddhist viewpoint. Seth (2021, 149) argues that Buddhists think that there is no permanent self, and then he claims that Buddhists have attempted to reach entirely selfless states of consciousness. My claim is that at first Seth seems to be on the right track, but unfortunately, makes same kind of oversimplification as Letheby does. Buddhists do claim that there is no permanent self to be found, but Seth`s assumption about the aim of mind training is wrong. In the chapters on Buddhist philosophy and mind training it will become clear why this simplified view that Letheby and Seth advocate is mistaken.

Coming back to the third factor of the naturalistic mechanism of psychedelic therapy, empirical evidence suggests that psychedelics cause changes in DMN and SN. Neuroscientists Karl Friston and Robin Carhart-Harris have developed a theory called RElaxed Beliefs Under pSychedelics (REBUS), which is connected to the predictive processing framework. According to Letheby (2021, 129-136), in REBUS theory DMN and SN are seen to be responsible for the hierarchical self-model. This self-model represents the cognitive binding which creates an enduring self. This self-model also controls and limits the representations that humans can make of the world. When psychedelics affects the DMN and SN in the brain, it starts a process of predictive self-unbounding. Letheby argues that changes in DMN affect the experience of the narrative self, and changes in the SN affects the experience of the minimal self. More closely, what kind of effect psychedelics have on these networks depends on the amount of substance taken and from the set and setting. Letheby concludes that from the abovementioned follows a testable prediction: changes in the narrative self and minimal self has to be connected to the changes in the DMN and SN.

Now the basic elements of Letheby`s naturalistic mechanism of psychedelic therapy have been presented. What comes out is a theory that approaches the mechanism of psychedelic therapy from the methodological naturalist and physicalist point of view, and at the same time relies on computational predictive processing framework. Letheby´s theory also takes experience seriously, because it argues that certain kind of experiences are undeniable part of the naturalistic mechanism of psychedelic therapy. However, besides this, it argues that these experiences can be explained by using predictive processing and predictive self-unbinding.

I think that Lethebys theory has a serious philosophical problem, and that there is also a problem how Letheby understands mindfulness and Buddhist thought. Therefore, my argument in this thesis against Letheby`s theory is twofold. Firstly, I will criticise Letheby`s philosophical view. This happens in the chapter called predictive processing and phenomenology. Secondly, I will criticise Letheby`s ideas about mindfulness, and also some features of mindfulness studies in general. This happens in the chapter called mindfulness versus Vajrayana Buddhist mind training. Now I simply point out one problem that comes from an analogy Letheby uses when he describes the predictive processing framework.

Earlier in this section we saw how Letheby argued that in the framework of predictive processing brains can be seen as a machine that makes predictions. This is potentially misleading analogy. Reason is that human nervous system and brain is not designed by anyone. They are results of evolutionary phylogenetic drift. (Maturana & Varela 1998, 169) As Frank et. al. (2024) further explains, it has become evident in recent molecular-biological research that living things or organisms are fundamentally different than machines. One way to illustrate this difference philosophically is to use the concepts of parts and whole. In machines the properties of its components are independent of the whole and exist prior to whole. The purpose of machine lies outside the machine in its user. However, in a living organism the properties of the parts depend on the whole and do not exist before the whole. Organisms always acts on its own behalf and towards its own ends. Therefore, organisms have intrinsic purposiveness that derives from their biological autonomy. From this becomes clear that seeing brain as or like a machine really makes no sense.

Despite my criticism here and upcoming critique, I do believe that Letheby is on the right tracks about the sense of self and it`s connection to the human well-being and suffering. If scientific studies do find out some practical ways to use predictive processing framework in alleviating human suffering, that is of course wonderful. In the next part of this thesis, I flip the “metaphysical table” and approach the mind from the viewpoint of subjective experience and philosophical view of idealism, and eventually try to land on some kind of “middle ground”. I argue that this can potentially bring useful view on how to see psychedelic therapy, or at least complementary viewpoint for the psychedelic studies. I will also argue that Buddhist philosophy and Vajrayana Buddhist mind training framework are better suited to understand the experiences of ego dissolution and its suffering alleviating properties than the framework of modern mindfulness.

4. BUDDHISM AND BUDDHIST PHILOSOPHY

In this part of the thesis, I go through some general notions about Buddhism and analyse the relationship between Buddhism, Christianity, and science. Then I present a short pre-historical, historical, and philosophical exposition of Buddhist thought. This exposition is not intended to give a comprehensive picture of Buddhist philosophy. This would be mission impossible because of the share vastness and complexity of Buddhist thought. My exposition simply gives one possible view of how the history of Buddhist philosophy can be seen, although I do claim it includes some widely or generally accepted Buddhist ideas.

Main purpose behind this exposition is to see Buddhism as an evolving tradition, although it does have some basic teachings that almost all Buddhists agree with. The historical and philosophical exposition also prepares the ground for understanding the Buddhist mind training. Chapters on mind training are from the viewpoint of Vajrayana Buddhism, and especially from teachings called Mahamudra. However, before exploring them I go very shortly through two common Buddhist mind training maps. After this I explore Buddhist philosophy of mind and present my argument that Buddhism, in the light of the Western metaphysics and philosophy of mind, can be seen as a form of phenomenology, a non-dual phenomenology. Lastly, I criticize the philosophical foundation of predictive processing framework that Letheby uses in his naturalistic mechanism of psychedelic therapy.

Today Buddhism is categorized among the four major world religions. However, the definition of religion is very problematic. For example, Husgafvel (2023, 48) argues there have been many attempts to give religion an unambiguous definition but none of the proposed ones have managed to achieve any widely shared approval. Despite this, I believe that Buddhism is probably well suited to be called a religion. Beside Christianity and Islam, Buddhism is also usually categorized as a missionary religion. This is because Buddhism has spread far beyond the cultural framework where it was born. From its North-Indian birthplace Buddhism spread to Sri Lanka in 200 bce, to China in 100s, to Korea in 300s, to Japan in 500s, to many Southeast Asian countries between 400-600s, to Tibet in 600s, and finally also to West in 1800s. (Buswell & Lopez 2014, xix-xxiv.)

Although I do claim that Buddhism is a religion, it`s nature seems to be somewhat different from some other religions. As an example of this, let´s compare Buddhism to Christianity. As Dalai Lama[2] (2005, 68) points out, there are no creator God or eternal souls in Buddhism. Historical Buddha also never answered the question of the origin of the universe (Dalai Lama 2005, 77). Old Buddhist cosmologies argue that a particular universe goes through formation, expansion, and destruction, and that there are countless number of these universes. Therefore, existence in Buddhism has no beginning and no end. (Dalai Lama 2005, 75-81.) Dalai Lama (2005, 107-111) also confesses that in his personal opinion, Darwinian evolution theory gives a better explanation of the development of human being than some old accounts of Buddhism. He has also said that if neuroscience comes up with information that directly contradicts Buddhist philosophy, then philosophy has to change to match the science (Vago 2022, 174).

It is important to note that Dalai Lama is only one, albeit very influential, Vajrayana Buddhist teacher. I believe there are many Buddhists who probably disagree with him. However, I agree with Dalai Lama especially on the notion of Darwinian evolution theory. It is clear that biological evolution has tremendous explanatory power. It really tells us how living things change through time rather than simply give one possible view about the origination of life among other explanations, like Christian creationism (Coyne 2009). Biological evolution describes how human beings have evolved from other animal species (see e.g.: Tattersall 2013).

From the abovementioned it may seem that Buddhism has more common ground with a so called "scientific worldview" than Christianity. This observation may sometimes lead to claims that Buddhism is a science. However, this is not true. Buddhism differentiates from the "objective" third-person science because it takes a "subjective" first-person view towards investigating the world (Wallace 1999, 176). The reason why Buddhism takes a first-person view is it`s soteriology. It is true that Buddhism is an organized discipline which aims to free human being from suffering (Thurman 1994, 17), but it is also true that Buddhist theories of mind are not formulated into a scientific hypothesis (Thompson 2020, 43).

[2] Dalai Lama is honorary title given to the incarnation lineage of the Gelug school of Tibetan Buddhism. Present day Dalai Lama is the 14th one called Tenzin Gyatso. He has written many books about Buddhism in English. (Buswell & Lopez 2014, 209-210.)

The first-person point of view can be seen for example in an early Buddhist text called The Way of the Dhamma[3] (p. *Dhammapada*), which is one of the most famous Buddhist texts. It starts like this:

> "All mental phenomena have mind as their forerunner; they have mind as their chief; they are mind-made. If one speaks or acts with an evil mind, suffering (p. *dukkha*) follows him just as the wheel follows the hoofprint of the ox that draws the cart.
>
> All mental phenomena have mind as their forerunner; they have mind as their chief; they are mind-made. If one speaks or acts with a pure mind, happiness (p. *sukha*) follows him like a shadow that never leaves him." (The Dhammapada, 1986.)

Sometimes also a weaker claim is made that Buddhism is a "science of the mind". Supporters of this claim argue that Buddhist forms of meditation lead to scientific discoveries about the mind. This is also not true. In Buddhism, philosophy always guides the mind training practitioner into having certain kinds of experiences and insights. Therefore, these experiences and insights do not come from an open-ended empirical inquiry. (Thompson 2020, 43.) This point becomes clear in the chapters on Vajrayana Buddhist mind training, where I present that meditation and philosophy can`t be separated from each other.

The short verses that start the The Way of the Dhamma also introduces the juxtaposition of suffering and happiness, or stress and ease, in ethical or moral terms. I`m not going to go deeply into ethical dimensions of Buddhism in this thesis. However, as was already mentioned in the introduction, ethics are very important part of Buddhism. Usually, Buddhism is seen to have five precepts (p. and skt. *pancasila*, tib. *bslab pa inga*) or ethical guidelines that create conditions for progress in mind training path to liberation from suffering. These are: 1) to abstain from intentionally killing sentient beings, 2) to abstain from stealing, 3) to abstain from false speech, 4) to abstain from sexual misconduct, and 5) to abstain from indulging intoxicants in a way that impairs judgement.

[3] In Buddhism pali word *Dhamma* (skt. *Dharma*) usually means the teachings of the Buddha, but *dhamma* can also mean a fundamental constituent element, or simply phenomenon (Buswell & Lopez 2014, 242). Latter usage of the word becomes clarified in later chapters.

(Buswell & Lopez 2014, 616.) In the upcoming section on karma, I will explore what intentional action means in Buddhist sense and why it is so important in Buddhist thought. If Buddhis ideas about moral behaviour is compared to Western philosophy of ethics, I argue that they mostly resemble virtue ethics, where a moral character is more important than following certain rules or emphasizing consequences of actions.

Although in the above I argued that Buddhism is not a science, I do endorse one trend of seeing Buddhism more scientific than religious. This trend is called psychologization, and basically it means that in this thesis I privilege better mental health over better rebirth or reincarnation. (see: Husgafvel 2023, 64.) However, as it comes clear later, I also argue that trend towards psychology can be already seen in Buddhism without "scientific psychologization". This is true especially in Vajrayana Buddhism, where liberation from suffering is seen to be possible to achieve in one lifetime, and this is declared to be the aim of the practice. Therefore, it is not advisable to "waste time" hoping for better rebirth or guide oneself towards a goal that is reached through practices like phowa (skr. *samkranti,* tib. *pho ba*)[4]. I come back to the question on rebirth and reincarnation in chapter on Buddhist philosophy of mind.

4.1 PRE-HISTORY OF BUDDHISM

There is no undeniable evidence about the existence of historical Buddha. However, common opinion among scholars today is that a person named Siddhatha Gotama really lived somewhere between 566-386 bce. (Emmanuel 2013, 1.) Gotama`s Buddhism was naturally not born in an ahistorical vacuum. Philosopher Stephen Laumakis (2013, 14-24) argues that the evolution of Indian religion and philosophy can be divided into three distinct main phases. These are called: 1) Dasyus, starting from 2500 bce., 2) Aryans between 1500-500 bce., and 3) nine post-Vedic schools starting from around 500 bce.

[4] Transferring consciousness or phowa is a tantric practice where practitioner ejects one`s consciousness out of the body through the aperture at the top of the skull (in time of death). Usually, in this way consciousness is said to transfer into Buddha Amitabha`s pure realm. (Buswell & Lopez 2014, 641-642.)

The first phase of Dasyus included nature worship, gods, and some kind of idea about the life beyond death. Dasyus also probably assumed supernatural powers behind those natural events that they couldn`t explain. From the Western point of view, Dasyus can be seen to hold beliefs that are usually categorized as religious or theological. (Laumakis 2013, 15.)

In the second phase Aryans replaced Dasyus as the ruling people of the Indus-river area. Aryans ritualized the beliefs of Dasyus and formed a Brahmanical priesthood. Aryan ideas and notions about life are written in the texts called the Vedas, the Brahmanas, the Aranyakas, and the later more philosophical Upanishads. These texts together draw a diverse picture of polytheism, ritualistic fire sacrifice, non-violence (skt. *ahimsa*), vegetarianism, asceticism, yoga, and believes on rebirth or reincarnation. Upanishads also later replaced polytheism with monotheism and philosophical monism. (Laumakis, 2013, 14-19.)

The third phase of nine-post Vedic schools can be seen as a more precise clarification of details. The most important philosophical part of the third phase was the formation of the so called nine schools (skt. *darsana*). These schools are divided into six orthodox (skt. *astika*) and three non-orthodox (skt. *nastika*) ones. Buddhism is seen to belong to a non-orthodox class. Non-orthodoxy in Buddhist case means that Gotama was one of those teachers who didn`t accept Vedas and Upanishads as an ultimate authority on knowledge. (Laumakis 2013, 19-24.) Therefore, it is important to understand that although Buddhism have and use many same concepts than earlier Indian writings and other Indian born religious and philosophical traditions, those concepts can mean different things in Buddhism.

4.2 MAIN TEACHINGS OF BUDDHISM

Suffering is the most important concept of Buddhism. As Thompson (2020, 13) argues, it makes no sense at all to try extract Buddhist philosophy from its soteriology. The practical Buddhist soteriology that aims to liberate from suffering is found in the Gotama`s first public teaching called Setting in Motion of the Wheel of Dhamma (p. *Dhammacakkappavattana Sutta*). This text explains the reason for suffering, and the way out of suffering. (Emmanuel 2013, 5-7.)

According to the abovementioned sutta, suffering is born from craving or desire (p. *tanha*) to find everlasting pleasure. From this follows grasping or clinging into permanence. But in the sutta Gotama teaches that all phenomena are changing and therefore impermanent. Phenomena comes into existence through complex web of conditions and reasons. Therefore, nothing exists independently, nothing has an unchanging, fixed essence. Liberation from suffering comes through experientially knowing the impermanent nature of phenomena. This knowing is achieved through wisdom (p. *panna,* skt. *prajna*), mind training, and morality or ethics. (Emmanuel 2013, 5-7.)

When the Buddhist idea of impermanence is applied into person, the person is seen to be composed from five psychophysical aggregates (p. *khandha*, skt. *skandha*). From these aggregates comes the model of a personal self. The five aggregates are: 1) body (p. and skt. *rupa*), 2) feelings (p. and skt. *vedana*), 3) perceptions (p. *sanna*, skt. *samnja*), 4) volitions (p. *sankhara*, skt. *samskara*), and 5) consciousness (p. *vinanna*, skt. *vijnana*). There is nothing outside these aggregates that can be found and called a real self. (Emmanuel 2013, 6; Buswell & Lopez 2014, 828.) This is the core idea of the Buddhist non-self.

However, it is important to note that for the Buddhist practitioner, the purpose of these aggregates is to investigate the physical and mental life. From this investigation comes the discovery of the unfindability of a habitually experienced permanent self (Thurman 1994, 37). In the light of the Western philosophy on personhood, the idea of non-self can be compared to bundle theories. But I argue that most importantly, the idea of aggregates leads to see the person as constantly changing process that has no fixed or unchanging essence. How many aggregates can be categorized, or remembering the correct number of aggregates, is secondary.

Sometimes Buddhist non-self is described by saying that the self doesn`t exist. As I presented before, Letheby is one example of this. I argue that this claim is either misunderstanding or oversimplification. It is important to understand that failing to find something in Buddhism doesn`t automatically mean it´s non-existence. As Dalai Lama (2005, 35) explains, Buddhist “scope of negation” sees that there is a fundamental difference between something that is not found, and something that does not exist.

As was already seen before, in Buddhism everything is constituted by a web of dependent origination (Dalai Lama 2005, 69). Therefore, self is not non-existent, but what non-self means is that a permanent, unchanging self is unfindable. This point becomes also clear when the Sanskrit etymology of the non-self, *anatman,* is compared to Self, which is *Atman*. The point of non-self is to deny self if it is understood as unchanging and essential Self that one ultimately is (Buswell & Lopez 2014, 78.), but not to deny self how it is usually understood in the Western secular context.

One further notion here is that as Thompson (2020, 86-88) points out, there are some views in contemporary neuroscience that brain generates an illusion of self. Thompson argues that when these neuroscientists perceive the brain and don`t find a self in there, they may simply conclude that Buddhism is right, the self doesn`t exist. But what Buddhist´s means about the self is that positing the essential, permanent self is not only cognitive, but very much affective. The feeling of self is based on affective grasping or clinging for the permanent self, and this grasping or clinging is what makes human being suffer. Buddhism argues that beside intellectually understanding the teachings (p. *dhamma*, skt. *dharma*), the way out of suffering must also include the stopping of the feeling or habituation that there is a permanent, essential, unchanging self.

Third main teaching in Buddhism besides suffering and non-self is the idea of karma (p. *kamma*). Sometimes karma is described as mechanistic, absolute law of cause and effect, or a law that defines everything that happens in the whole universe. But as Dalai Lama (2005, 90) explains, in Buddhism everything is not a function of karma. Causality in general and karma are two different things. In Buddhism karma has two more precise meanings. Firstly, Buddhist notion of karma must be seen in a context of mental intention. This means that karma is the fruition of an intentional actions. In Buddhism intentional actions are divided into wholesome, unwholesome, mixed wholesome and unwholesome, and indeterminate actions. Indeterminate means those actions that are done after liberation. These actions do not bring forth fruition anymore. Otherwise, there is a necessary relation between the action and its fruition, and the fruition is always received by the one who committed the action. This means that in Buddhism, nobody can receive the fruition of another`s karma or redeem another`s karma. (Buswell & Lopez 2014, 420.) Therefore, I argue that Buddhist idea of karma is best described as a psychological process, not a metaphysical law. As Varela et. al. (2016, 110) puts it, Buddhist karma means psychological causality, and it is not a predestination or destiny.

Secondly, karma also refers to a cycle of human life that is composed of twelve links (p. and skt. *nidana*). These links are presented in a pictured way in Buddhist *wheel of life* -pieces[5]. In this picture every link on the wheel is a condition for the next link to appear. This linkage is usually called dependent origination (p. *paticca-samuppada,* skt. *pratityasamutpada*), although literally Sanskrit word *pratityasamutpada* means "dependence (*pratitya*) upon conditions that are variously originated (*samutpada*)" (Varela et. al. 2016, 110). The main idea behind this circular structure or wheel is that it constitutes the habitual continual pattern to anchor the experience in a permanent, essential self (Varela et. al. 2016, 110-111). I will next go very shortly through all twelve links.

First link called ignorance (p. *avijja*, skt. *avidya*) is the ground for all causal action. Ignorance means belief in a permanent, essential self or not knowing (experientially) the nature of the mind. Second link is called volitional action or mental formations (p. *sankhara*, skt. *samskara*). Because of the ignorance, habitual actions based on the belief of permanent self arise. When all twelve links are seen as arising in continuation of time, two first links can be seen as past conditions that give rise to all next eight links from third to the tenth. These next eight links are happening in the present time. (Varela etc. 2016, 111.)

Third link is called consciousness (p. *vinanna*, skt. *vijnana*) which can mean two things. It can be a first moment of sentience of the living being, or a first moment of consciousness in any situation. If latter definition is used, then it is conditioned by ignorance and volitional actions. Fourth link is called psychophysical complex, or name and form (p. and skt. *namarupa*), or mind and physical body. Moment of consciousness requires both mind and body, and this moment can be primarily mental or primarily sensory. Fifth link is six senses of seeing, hearing, tasting, smelling, touching, and thinking (more on senses and sense fields later in the chapter on Theravada Buddhism). Sixth links is called contact (p. *phassa*, skt. *sprsa*) which means that each sense is able to contact it`s sense field. Seventh link is feeling (p. and skt. *vedana*) and it is based on six senses and contact. Feeling means that all experience has a tone. In most basic from, this tone can be pleasurable, displeasurable, or neutral.

[5] Example of a colourful Tibetan picture of the wheel of life in appendix A, and wheel of life with the names of the links and other clarifying texts in appendix B.

Eighth link is craving (p. *tanha*, skt. *trsna*) and it arises from feeling. Craving means a desire for pleasurable feeling and aversion towards displeasurable feeling. Before this link all earlier links have been kind of rolling automatically from the previous one. However, craving is the link where Buddhist practitioner can finally do something. This is where through mind training a person can interrupt the wheel or causal chain and let go of the next ninth link. (Varela etc. 2016, 113-114.)

Ninth link is called grasping or clinging (p. and skt. *upadana*) and is the result of craving. This is how normal person functions in the world. Tenth link is called becoming (p and skt. *bhava*). It means that grasping automatically sets of reaction towards a new situation in the future and this forms new psychological patterns. Eleventh link is birth (p. and skt. *jati*), which means a birth of the new situation. This is the point where person usually wakes up to the causal chain and wants to do something about the situation. However, in normal life, this is already too late. The point where awareness of the causal chain has to happen is the eighth link of craving. Then twelfth, the last link, is called decay (or aging) and death (p. and skt. *jaramarana*). In any process or arising of living thing or phenomena, the dissolution of living thing or phenomena is inevitable. Death is the causal link to the next cycle of the wheel. Death of one conscious moment is the causal precondition for the next conscious moment. If in the death there is still ignorance, then the causal chain starts over again. This wheel consisting of twelve links is called samsara or everyday world, and in Buddhism it is seen to be penetrated by suffering. (Varela etc. 2016, 114-115.)

As was already mentioned, the causal wheel is possible to break between the links of craving or clinging and becoming. When this happens and the wheel is broken, then Buddhist soteriology is fulfilled. (Skilton 2013, 76-77.) But what happens then? To answer this question concept of nirvana (p. *nibbana*) has to be introduced. In early Buddhism nirvana is usually understood to mean the cessation of afflictions (p. *kilesa*, skt. *klesa*) that are ignorance, greed or sensual attachment (p. and skt. *raga*), and hatred or aversion (p. *dosa*, skt. *dvesa*)[6], actions born from these afflictions, and eventually also the cessation of mind and body. (Buswell & Lopez 2014, 589-590.)

[6] See appendix A. In the traditional image the three affliction or "poisons" are marked or pictured at the innermost centre of the wheel as three different animals.

However, the concept of nirvana is problematic and there is much discussion in Buddhism about what nirvana is or what it could be. In some early texts it is said that nirvana is a kind of plane or realm. But if this is true, that would mean nirvana must be part of samsara, and then it includes suffering also. In turn, if nirvana is seen as annihilation or end of all experience, then it becomes a problem of how historical Buddha lived and taught forty-five years after his attainment of nirvana. Therefore, there is a conception of nirvana with reminder and without reminder. First one is that although the three afflictions are gone, the mind and body still endures. Second one is the idea of parinirvana that is achieved in death, and this consists also the cessation of mind and body. (Buswell & Lopez 2014, 589-590.)

As we will later see, this is not all that there is to Buddhism. However, now the main Buddhist teachings and concepts of suffering, non-self, karma, and dependent origination, which are common to all Buddhist schools and sects, are hopefully explained in an understandable way. In the next three chapters I go through a very short history of the main ideas behind the three vehicles of Buddhist teachings called Theravada, Mahayana, and Vajrayana. In there, and also in the section on Buddhist mind training, we can see how the understanding and interpretation of nirvana and rebirth or reincarnation changes and evolves through time.

4.3 THERAVADA BUDDHISM

Term Theravada comes from the Pali language, and it literally means "doctrine (p. *vada*) of the Elders (p*. thera*)". Central to Theravada is the belief that it descends straight from the Gotama´s historical disciples. In Theravada the basic texts of Buddhism called Pali Canon were compiled. These canonical texts are divided into three parts: 1) collection concerning discipline (p. *vinaya-pitaka*), 2) collection of discourses (p*. sutta-pitaka*), and 3) collection of advanced teachings *(*p*. abhidhamma-pitaka*). The first collections consist of rules that govern the community of munks and nuns and their relations to surrounding society. Second collection includes historical Buddha`s teachings in the form of conversations. These texts have wide variety concerning topic and style, but they usually concern Buddhist doctrine and right behaviour. Third collection is constructed from seven separate treatises that together formulate an abstract philosophical system of *abhidhamma*. (Skilton 2013, 71-74.)

Doctrinally Theravada can be seen to have four main elements. First two elements, non-self and dependent origination have already been dealt with. Third element consist of five aggregates, which have been dealt with, but also of twelve sense fields (p*. ayatanas*). Analysis of sense fields include six senses and their bases which are: 1) eye and visual objects, 2) ear and sound, 3) nose and smell, 4) tongue and taste, 5) skin and objects that can be touched, and 6) mind and thoughts. For all these sense fields there is a corresponding consciousness (p*. vinnana*) also. (Skilton 2013, 76-77.)

Today the classification of senses is different than in early Buddhism. As Seth (2021, 76) points out, in Western philosophy, Aristotle classified five senses in his *De Anima* that was written around 350bc. These senses are the same as the first five ones in Buddhism, but notably exception is the Buddhist idea of mind that senses thoughts. Today science of course categorizes more than five or six senses. These include for example proprioception, the sense of body position, and thermoception, the sense of temperature (Seth 2021, 76). It is also useful to take note that in Buddhism, the meaning of the term consciousness (p. *vinnana*) differs from the Western philosophy of mind. Further analyses of the consciousnesses in Buddhism will be returned in the part on Mahayana where the number of consciousnesses is increased by two.

Fourth main element of Theravada philosophy is that after the above presented sense field analyses into six consciousness are done, next step is the formations of *dhammas*. In the system of advanced teachings or *abhidhamma*, *dhammas* are seen as ultimate experiential "building blogs" that constitutes the reality. *Dhammas* are perhaps best understood in psychological context as "phenomena", but not in the Immanuel Kant`s way where phenomena are opposed to noumena. The main aim of *abhidhamma* was to account and organize all *dhammas*. (Skilton 2013, 76-77; Varela et. al. 2016, 117.) If the idea of *dhammas* is viewed from the viewpoint of Western philosophy, *abhidhamma* can be seen to move from the analyses of the personhood to a more comprehensive metaphysics about the reality. However, as the part on Mahayana will reveal, this move is not without its critics.

At the end of this chapter on Theravada, I want to make one brief comment. There is some tendency within academic scholars (and also Buddhist teachers) to try make an original and definite presentations of Buddhism only on the bases of Pali canon. Emmanuel (2013, 3) warns that it is not reasonable to assume that all Buddhism can be explained in this way. In this thesis I take seriously all main three developmental phases of Buddhism. As I already mentioned in the introduction, I believe there is valid argument to take Vajrayana, as it is regarded as the latest development, to be the most evolved vehicle of Buddhism. I believe this is reasonable if Buddhism is seen as an organized discipline that is somewhat self-critical, in a sense that it learns from its errors and overreactions and corrects itself. In this way every major development in Buddhist thought and practice can be seen as a comment towards former and a betterment of either philosophy or mind training practice, or both.

4.4 MAHAYANA BUDDHISM

After some time of the death of Siddhatha Gotama, Buddhist community of practitioners (p. and skt. *sangha*) split it into two different camps. Another part of the sangha become known as community of Elders, and another become called as a great community (skt. *maha-sangha*). Traditional sources that mention this split are unable to define where, when, and why it happened. (Skilton 2013, 72.) However, in 500 years after Siddhatha Gotama the adherents of *abhidhamma* had already been evolved into at least eighteen different schools that debated each other on various philosophical points (Varela et. al. 2016, 219).

The philosophy of Mahayana that the great community started to develop is usually divided into two main schools that are called Madhyamika (middle way) and Yogachara (yoga practitioner). The most important concept in Mahayana philosophy is emptiness (skt. *sunyata*). In a very general way, emptiness can be understood as a refined conception of earlier teachings, meaning the lack of unchanging, essential self. But besides the self, emptiness in Mahayana becomes to characterize all other phenomena as well. (Blumenthal 2013, 88-89.)

From the viewpoint of Mahayana, it is accepted that earlier Buddhist traditions and schools deconstructed the sense of unchanging, essential self. However, Mahayana sees that earlier Buddhists left intact the reliance to the mind independent world, and the minds relation to the world. (Varela et. al. 2016, 221.) Mahayana deconstructs all the three: the subject, the object, and the relation. Probably the most important philosopher of Madhyamika is called Nagarjuna[7]. Because of his all-encompassing deconstruction, Nagarjuna can be seen to take also a negative stance towards *dhammas* (as being real). The substitutive idea for *dhammas* in Mahayana becomes the understanding of two existences: conventional and ultimate. (Blumenthal 2013, 88-89.)

So, what does the two different existences mean? Nagarjuna`s main argument is that all phenomena doesn`t have an intrinsic nature, or in other words all phenomena is empty. To unpack this claim, let`s break it apart. Firstly, Nagarjuna doesn`t argue that nothing exists. On the contrary, he argues that it can be accepted that conventional phenomena do exist, but the existence of conventional phenomena is always only momentarily and dependent on another phenomena. In this way Nagarjuna denies eternalism, which would mean that phenomena exist independently and forever. Secondly, Nagarjuna also denies nihilism, which would mean that there could be absolute nothingness. Because as was already stated, conventionally it can be admitted that phenomena do exists. So, phenomena is empty but not non-existent. From this denial of two extremes originates the name Madhyamika, the middle way. (Blumenthal 2013, 90.)

I argued before that in Buddhism there is a distinction between something that is not found and something that does not exist. Now, in the case of self, Nagrajuna`s two existences means that we can accept self exists conventionally, but at the same time argue that self can`t be ultimately found. Therefore, to simply argue that self doesn`t exist, like for example Letheby does, misses the point Nagrajuna and Mahayana Buddhism makes.

[7] Nagarjuna is traditionally regarded as the founder of the Madhyamika school. Scholars think that he lived in south India during second century, but not much is known about his life. Nagrajuna is best known for his writings on emptiness, especially his famous text Verses on the Middle Way (skt. *Mulamadhyamakakarika*). In his writings Nagrajuna is mostly criticizing *abhidhamma*, but he also targets some other non-Buddhist philosophers. (Buswell & Lopez 2014, 561.)

Two most important philosophers of the other main branch of Mahayana philosophy called Yogachara are stepbrothers Asanga[8] and Vasubandhu[9]. Yogacara can be separated from Madhyamika by analysing their different orientation. When Madhyamika emphasises metaphysics, Yogachara concentrates more on the study of subjective experience (phenomenology). In general, Yogachara also understands emptiness as denying independent, unchanging essence of any phenomena just like Madhyamika does. However, what Yogacara also argues is that all we can ever know about objects are their mental impressions. In the language of Buddhism, a sentient being can never directly contact objects. It´s consciousness can only be aware of its own products. (Powers 2011, 222-223.) Therefore, in Yogacara we have a fully developed viewpoint of idealism. However, if this idealism is seen to be metaphysical or not, is an issue I come back later many times.

The reason why Yogacara is also called mind-only (skt. *cittamatra*) or non-dualism is because like all phenomena, also subject is seen as an experience in awareness or mind-stream. Therefore, subject and all objects are seen to be only conceptual constructions. In Yogachara, mind have three aspects: 1) conceptual, 2) dependent, and 3) perfected. First one is the erroneous aspect where the subject-object distinction is believed to be true: that the self is something different from all other objects of consciousness. Second aspect is the dependently originated but non-constructed mind-stream. This means that if the first constructed aspect is experientially "seen through" or "removed", what remains is the non-dualistic mind-stream. Then, third aspect is the one that Buddhas fully recognize: dependent non-dual aspect of the mind-stream is ultimately free of conceptual constructions. (Burton 2013, 154-155.)

In above I went shortly through the basic idea of non-duality in Yogacahara. However, there are more to clarify about the concept of non-dualism, because it is very ambiguous and difficult term. For example, Loy (2019, 3-26) argues that non-dualism in general can be divided into three

[8] Asanga (320-390) was born in Purusapura, area known today as Peshawar in Pakistan. After converting to Mahayana, he spent twelve years in meditation retreat and received a vision of future buddha Maitreya. Three important texts by Asanga are: 1) *Abhidharmasamuccaya,* an exposition of the categories of *abhidharma* from the viewpoint of Yogachara, 2) *Mahyanasamgraha,* an exposition of Yogacara doctrine including the topic of *alayavijnana*, and 2) *Yogacarabhumisastra*, an exposition of *dhyana* practice and boddhisatva`s practice of six perfections (skt. *paramita*). (Buswell & Lopez 2014, 69.)

[9] Vasubandhu (4th or 5th century) was born in Purusapura, area known today as Peshawar in Pakistan. He was a Theravadin Buddhist monk and wrote an influential text called *Abhidarmakosha*. After encountering Asanga, Vasubandhu converted into Mahayana and then set forth in a text called *Trisvabhavanirdesa* the central doctrine of Yogacara, the three aspects of mind: conceptual, dependent, and perfected. (Buswell & Lopez 2014, 961-962)

different modes: 1) non-dual thinking, 2) monistic metaphysics, and 3) experiential non-dualism of subject and object. Loy`s point is that in Mahayana Buddhism non-dualism is only experiential. I agree with his view, and next present how Loy expresses the categorization of the three different modes.

Firstly, if Mahayana in its entirety is seen through non-dualistic thinking, it becomes clear that it is not non-dualistic at all. This is because Madhyamika does not give any positive claim about the ultimate existence. Instead, it denies all claims about it. (Loy 2019, 17.) And as was seen before, Yogacara agrees with Madhyamika in the case of general understanding of emptiness. Although in Mahayana mind training practitioners do reach nirvana or cessation of suffering like in earlier Buddhism, Nagarjuna argues that there is no distinction between nirvana and everyday world (skt. *samsara*). From this follows that those limitations that everyday world has are also same in nirvana. (Loy 2019, 123; Varela et. al. 2016, 234.) Therefore, from the perspective of Mahayana, nirvana isn`t an annihilation or end of all experience or a place or realm outside everyday world.

Secondly, Loy (2019, 17-18) argues that Yogachara does not actually claim that the objective world is a projection or manifestation of the mind. The split between subject and object Yogachara talks about arise inside the mind (or inside the experience). For this reason, Yogachara should not be categorized as monistic metaphysical belief system, although for example Edelglass & Garfield (2011, 190) argue that most Yogacara philosophers in India and Tibet are metaphysical or ontological idealists. However, in this thesis the view is that Mahayana Buddhism does not favour monistic metaphysics. I will again further elaborate this issue in the chapter Buddhist philosophy of mind.

Thirdly, taking aforesaid Yogacara division of mind into its three aspects into consideration, in the perfected aspect the mind of a mind training practitioner is without experiential split between subject and object. The removal of the conceptual aspect reveals the dependent, but non-dualistic base of the mind or experience. This idea may sometimes lead into misunderstandings. One example of this is a case where the aim of mind training practice is understood to enter into a state where there are no thoughts at all. From the perspective of Mahayana this is a misconception. As Loy (2019, 135-137) argues, experiential non-dualism doesn`t mean that one should end all thoughts. The point of mind training is to recognize the nature of the thoughts, or the nature of the mind. In non-dualistic view, thinker is not something different from thoughts.

With Yogacara new ideas of seventh and eight consciousnesses were born (which I already mentioned earlier in the part where the ideas of six consciousnesses were analysed). The eight consciousness is called storehouse consciousness (skt. *alayavijnana*). This is where the so-called karmic seeds (skt. *bija*) resides. The idea of eight consciousness is that all perceptions and understanding of phenomena is based on these seeds. This means that the world is seen and understood the way these seeds "colour" it to the experiencer. Or in other words, past experiences dictate how one experiences the world, and also habituates one to act based on these seeds. The seventh consciousness is usually called afflicted consciousness (skt. *klistamanas*). This is the consciousness that upholds the deluded view of an independent, unchanging, essential self (skt. *Atman*). Seventh consciousness is also based on eight consciousness. (Blumenthal 2013, 94.)

To sum up this part on the philosophy of Mahayana, there are two main ideas. Firstly, Madhyamika argues that all phenomena are empty. Everything arises or originates dependently. As Varela et. al. (2016, 224) points out, in today`s scientific Western context where emphasis is placed on the study of causes and conditions of material world, this understanding of emptiness may not sound at all surprising. Secondly, Yogachara agrees with metaphysics of Madhyamika, but as it concentrates on the study of subjective experience, it sees the world from an idealist point of view. Yogacara argues that when the soteriology of Buddhism is followed, it is the storehouse consciousness constructs the suffering. Therefore, in order to attain liberation from suffering, the storehouse consciousness must be purified from the "colouring" seeds or afflictions. When all afflictions are purified, the subjective basis of mind "flips" from eight consciousness (skt. *alajavijnana*) to so-called "stainless consciousness" (skt. *amala-vijanana*) (Powers 2011, 224).

Then, what happens after Mahayana? Loy (2019, 18) argues that in Yogacara Buddhist philosophy reaches its culmination point. I don´t think this is entirely true. As Varela et. al. (2016, 246) argues, in some Buddhist traditions there is further step to made beyond Mahayana called emptiness of naturalness. This term sounds weird, but it offers a hint of things to come. In the next chapter and in the chapters on Vajrayana Buddhist mind training I examine some new elements that Vajrayana adds to Buddhist thought.

4.5 VAJRAYANA BUDDHISM

Before moving into the philosophy of Vajrayana Buddhism, it is important to note that the history of Vajrayana is still understood imperfectly. This is because there are thousands of individual texts covering a time span of over millennium. It will take a lot of time before scholars can form a comprehensive picture of what these texts are saying. (Kapstein 2011, 245.) However, in the philosophy of Vajrayana, the Mahayana schools of Madhyamika and Yogacara are joined together. For example, in Santarakshita`s[10] philosophy the conventional truth comes from Yogachara`s systematic study of experience, and the ultimate truth comes from Madhyamika`s all-encompassing (metaphysical) deconstruction. (Duckworth 2013, 99.) However, besides this notion, I will not try to lay out philosophical history and outline of Vajrayana because it would take a lot of space. Instead, I only focus on some general idea and areas that are connected to the most important themes of this study.

Literally term Vajrayana means "thunderbolt method", but vajra also refers to two different elements that are skillful means (skt. *upaya*) and wisdom (skt. *prajna*) (Buswell & Lopez 2014, 957). The general aim of Vajrayana is the acceleration of the mind training path towards liberation from suffering with very potential and strong meditation and yoga practices. Texts called tantras containing these practices have been found from India after the beginning of the 500s, but it was not until the 700s that the notion of Vajrayana as a distinct category started to develop (Harvey 2001, 12; Husgafvel 2023, 54). So, in Buddhism, term tantra refers to esoteric mind training teachings. With these teachings practitioners may pursue both mundane (skt. *laukika*) and supramundane (skt. *lokottara*) powers. Mundane powers can be for example extending life and acquiring wealth. Supramundane power is to become a Mahasiddha[11]. (Buswell & Lopez 2014, 893-894.)

[10] Santarakshita (725-788) was born in Bengal, India. He argued in his famous work called "Ornament of the Middle Way" (skt. *Madhyamakalamkara*) that external world can`t be mind-independent, but also asserted that mind or consciousness lacks inherent existence. (Buswell & Lopez 2014, 773.)

[11] Mahasiddha means "great adept", and it is the ideal of tantric Vajrayana Buddhism (like Arhat in Theravada, and Bodhisattva in Mahayana). Historically Mahasiddhas could be monks or scholars, but many times they were also from the lower levels of society including butchers and prostitutes. Mahasiddhas also broke taboos of Indian societies by their behaviour. Despite this, Mahasiddhas are seen to be living Buddhas. (Buswell & Lopez 2014, 508-509.)

In the end of the chapter on Mahayana I argued that Vajrayana adds a step beyond Mahayana, and that may be called emptiness of naturalness. What I mean by this is that in Vajrayana, the bodily presence is seen as a fundamental path to liberation, and human body itself is seen to contain the wisdom. Therefore, tantra is best seen as a philosophy rooted in the body: it is embodied philosophy. (Duckworth 2013, 100.) Comparing this idea to Western philosophy, Duckworth (2013, 100) argues that it has some similarities to the ideas of French phenomenologist Maurice Merleau-Ponty`s (1908-1961) philosophy of flesh that is grounded in bodily behaviour and perception.

The main difference between Mahayana and Vajrayana can be seen in the attitude towards mind training path and practice. To make a division, Vajrayana is called a "resultant vehicle" and Mahayana "causal vehicle". What this simply means is that in Vajrayana, practitioner does not see Buddhahood or liberation from suffering as something distant in the future to be attained. In Vajrayana, Buddhahood is approached as immanently present and accessible right now. The form of practice associated with this idea is the guru yoga, where Vajrayana practitioner identifies herself with Buddha or Mahasiddha, or the appearing aspects of the Buddha or Mahasiddha. This instant perceiving of the qualities of Buddha or Mahasiddha is essential to all Buddhist tantra and tantric practice. (Duckworth 2013, 100-101.)

The philosophical foundation for the guru yoga practice comes from the idea of buddha-nature (skt. *tathagatagarbha,* tib. *bde gshegs snying po*), or in other words, the nature of the mind. (Duckworth 2013, 101; Kapstein 2011, 254-255.) This idea of buddha-nature is the same as Yogacharas idea of "stainless consciousness" (skt. *amala-vijanana*) I introduced already before. I will come back to what all this means in the next section on the Vajrayana Buddhist mind training. I hope in this way the idea behind the nature of the mind will be more accessible and not overly theoretical. I will also not go into historical debates between various sects or schools of Vajrayana. However, one important thing to highlight is that as Kapstein (2011, 255) argues, there is a strong current of idealist influence in many Vajrayana philosophers. However, those ones who were aware of the critiques of idealism of the Madhyamika philosophers did not affirm metaphysical idealism.

Today Vajrayana Buddhism may sometimes be seen as identical with Tibetan Buddhism. I think this is not entirely correct, because Vajrayana was originally born in India, and it is also practiced today in other places besides Tibet. However, next I shortly describe some history of how Vajrayana came into Tibet. Thurman (1994, 6-7) argues that in the early centuries of common era Tibet was a land of shamanism. And like most shamanism, Tibetans were also interested in mundane stuff (like acquiring power, wealth, and health). Tibet was also militarily expansionist, and shamans run a cult of kingship where the king was seen to be descended from heaven. In the early seventh century king Songen Gambo finally reached the Tibet`s military empire`s limits. Now without war, in the fear of losing unity between his warlords, he started to transform Tibet from feudal militarism into something more peaceful. Gambo started a systematic process of cultural adaptation. He sent scholars to India to learn Sanskrit and translate vast Indian Buddhist literature.

One of the most important and influential person behind the spread of Buddhism into Tibet was the earlier mentioned abbot and philosopher Santarakshita. According to Buswell & Lopez (2014, 773), Santarakshita was a renowned scholar in the "world`s first university" called Nalanda[12]. He was invited to Tibet by king Trisong Detsen in later half of 700s to teach Buddhism. However, after Santrakshita arrived in Tibet, a series of natural disasters happened. This was interpreted in the way that local Tibetan deities were not pleased to see the introduction of Buddhism into Tibet. Because of this opposition Santarakshita left Tibet and advised king Trisong Detsen to invite tantric master Padmashambhava[13] to subdue the local deities. After Padmashambhava succeeded in this, Santarakshita returned to Tibet. Santarakshita lived and taught in the first ever Tibetan Buddhist monastery called Samye until he died.

[12] Nalanda was the most famous of Indian Buddhist monastic universities. In its peak time it had around ten thousand students and fifteen hundred teachers. Many of the most famous Mahayana scholars lived and taught in Nalanda. It had an extensive curriculum including many Buddhist and Hindu philosophical schools, but also mathematics, grammar, logic, and medicine. Nalanda flourished between sixth and twelfth centuries and was burned down (partly by accident) by Muslim Turkic invaders with the whole library of thousands of manuscripts. (Buswell & Lopez 2014, 565.)

[13] Scholars generally agree that the legendary figure of Padmasambhava really lived in eight century and did visit Tibet. Some texts suggest that he was a magician, and he also had a reputation as an exorcist. Together with his Tibetan consort Yeshe Tsogyal, he recorded and concealed numerous teachings as hidden treasure texts (tib. *termas*) to be later revealed by meditation masters spiritually linked to him. (Buswell & Lopez 2014, 608-609.)

Today Tibetan Vajrayana Buddhism can be divided into five main schools or sects. These are: 1) Nyingma, 2) Kagyu, 3) Sakya, 4) Jonang, and 5) Gelug. I only introduce shortly two oldest ones of these schools because they are the most important to my thesis. Nyingma is regarded as the oldest of the tantric sects. Inside it, the first teacher of Dzogchen is seen to be Garab Dorje[14], who lived in the kingdom of Uddiyana, that is now located in the area of Pakistan. Also, Padmashambhava is seen as a foundational teacher of Dzogchen in Nyingma. Term Dzogchen means great perfection or great completion, and it is the name of the philosophical and meditative tradition that Nyingma upholds. Despite the abovementioned origin story, among the scholars Dzogchen is seen to be mainly Tibetan invention with a mix of many influences, including indigenous Tibetan Bön shamanism and Chinese Mahayana Buddhism. In fourteenth century, the great scholar, philosopher, and meditation master Longchen Rabjam (Longchenpa)[15] systematized the Dzogchen teachings, largely creating the Dzogchen as it is known today. (Buswell & Lopez 2014, 707.)

Before going into Kagyu sect, I shortly introduce one important texts that is believed to be compiled originally by Padmashambhava. This text is usually called Tibetan Book of the Dead (tib. *Bardo Thödol*), but the name is somewhat misleading. Expression *Bardo Thödol* can be understood to mean "(that which, when) heard, liberates (from the) gap (between death and rebirth)" (Crowley 2019, 19), or more simply "a book of natural liberation through understanding in the between" (Thurman 1994). Tibetan Book of the Dead is a subsection of a larger text called The Profound Teaching of the Natural Liberation Through Contemplating the Mild and Fierce Buddha Deities (Thurman 1994, xvi). The Tibetan Book of the Dead can be seen as an analysis of the human death process, and at the same time a guide for the preparation of the inevitable. As Dalai Lama reveals in the introduction to Thurman`s translation of Bardo Thödol, in Tibet this text has been used as an instruction for dying people. One aim of the book is to liberate human being from fear of dying. (Thurman 1994, xvii.) The reason why I introduced this book is that I will come back to it again in the section on the psychedelic Buddhism.

[14] Garab Dorje (c. 665) is a semimythological figure, who as a first human being has said to receive the teachings of Dzogchen from deity Vajrasattva (Buswell & Lopez 2014, 237).

[15] Longhenpa (1308-1364) received an ordination at the age of twelve and entered monastery when he was nineteen. There he trained under many teachers and achieved scholarly mastery of numerous traditions, including Nyingma, Kagyu, and Sakya. Longchenpa became disillusioned by the arrogance and pretension of many scholars and gave up monastery for wandering life. At twenty-nine years old he met yogi Kumaraja who transmitted him Dzogchen teachings. Later in his life Longchenpa founded eight monasteries and wrote many important works on both philosophy and mind training of Dzogchen. (Buswell & Lopez 2014, 439.)

The second oldest Tibetan sect is called Kagyu. This sect starts from tantric meditation master Tilopa[16] and his student Naropa[17], and then comes to Tibet with Marpa Lotsawa[18] and his student Milarepa[19]. In Tibet, term Kagyu is used of all oral transmissions of those teachings that goes through generations and can be traced back to India. (Buswell & Lopez 2014, 121-122). Mahamudra is the name of the philosophy and meditation teachings of Kagyu sect, and it literally means great seal. In Mahamudra, emptiness and phenomenal appearance come together so that it presses a seal into everything in both everyday world or samsara and nirvana. Therefore, in Mahamudra, the ordinary state of mind is both natural and ultimate. (Buswell & Lopez 2014, 500.)

Despite numerous different teachings and tantras among the five different sects or schools of Tibetan Buddhism, Thurman (1994, 73-74) argues that they all come originally from the pioneering works of Indian adepts and therefore emerge from the same roots. All tantras use imagination to approximate the goal of practice (guru yoga), and therefore these tantras can reach the goal of becoming a Mahasiddha or Buddha more quickly. Despite different sects of Tibetan Buddhism use somewhat different conceptual scheme and terminology, Thurman argues that there is no real difference between them. The most important thing is that these tantras aim to make possible the achievement of becoming a Mahasiddha or living Buddha in only one lifetime.

In next chapter I move from historical exposition and abstract philosophy to practical mind training. From all Vajrayana Buddhist mind training teachings, I will use an example of Mahamudra. I do this because: 1) according to Dzogchen Ponlop (2003, 16), among the tantras Dzogchen and Mahamudra are seen to be the most rapid paths to liberation, 2) the mind training path of Mahamudra is relatively easy to illustrate and therefore it doesn`t take so much space, and 3) there is some evidence that some mind training masters of Mahamudra may have also used substances

[16] Tilopa (988-1069) was a tantric practitioner who is counted among the eighty-four Mahasiddhas. He lived as a wandering yogi practicing tantra secretly. He also acted as a servant for a prostitute Barima by night and grinded sesame seeds for oil by day. Literally Tilopa means “Sesame Man”. (Buswell & Lopez 2019, 914.)
[17] Naropa (1016-1100) was a Buddhist monk and scholar in Nalanada. However, Naropa didn`t understand the experiential meanings of the texts he studied, and this led him to search Tilopa. After very hard and dangerous training Naropa realized what Tilopa taught to him. Most famous of Naropa`s mind training manuals are “Six Yogas of Naropa”. These instructions are important for many practising Tibetan Buddhists. (Buswell & Lopez 2019, 576.)
[18] Marpa Chökyi Lodrö (1012-1097) was a Tibetan translator and Buddhist master. He is regarded as the Tibetan founder of the Kagyu school. Tradition says that he studied under Naropa, but contemporary sources indicate that he never studied directly under Naropa. He probably received teachings of Mahamudra form Indian adept called Maitripa. Marpa was also Milarepas teacher. (Buswell & Lopez 2019, 533-544.)
[19] Milarepa (1028/40-1111/23) is probably the most beloved Tibetan meditation master. He became a Buddha through very hard practice despite killing many people when he was young. (Buswell & Lopez 2019, 541.)

that can catalyse psychedelic experiences. Although my own mind training history is mostly from the teachings of Dzogchen, I believe that I can also present the basic ideas of Mahamudra well enough.

4.5.1 MIND TRAINING IN VAJRAYANA BUDDHISM

The most important point this chapter highlights is that in Buddhism philosophy and mind training go hand in hand, or at least they should go. It is wrong to see philosophy and mind training as two entirely separate things. From this follows that in order to achieve liberation from suffering, only reading philosophy or sitting in unguided or misguided meditation doesn`t do the trick. Because this thesis is a work on philosophy and not a mind training manual, I will not describe any detailed meditation instructions here. In all forms of Buddhism, mind training teachings are advised to get from a qualified teacher who knows both experiential mind training and Buddhist philosophy.

I will use my own experiences of twenty years of serious and regular mind training to illustrate the phases of the Mahamudra mind training path with my personal experiences. This may seem unconventional, but I have two reasons to do this. Firstly, it is very hard to get a good sense or picture what mind training path is supposed to be like by only reading theoretical or abstract descriptions of mind training manuals or path maps. Therefore, I have decided to reveal something from my own mind training path so that the reader can better understand what this path may contain, and especially what the insights in this path may feel like. Secondly, there is widespread belief that achieving real results in mind training path is only possible for some very exceptional human beings and it entails some very heroic or gruesome meditation hours or retreats. I have even heard opinions that Western people in general could never really achieve anything. This is all total nonsense. The path to become a Boddhisattva or Mahasiddha is open for everyone, no exceptions. All that matters is your own resolute dedication to step into the path and follow it.

Like Simonds (2023, 60) explains and I already mentioned in the introduction, Buddhism has two main forms of meditation that are called calm abiding and insight or pointing to the nature of the mind. From the Buddhist point of view only through insight the soteriological aim of Buddhism can be fulfilled. Only calm abiding in itself, however much you do it, is not enough. Simonds argues that calm abiding can lead to experiences of pure consciousness (or Pure Consciousness Event,

PCE), that in Buddhism are usually classified as four immaterial realms of meditative absorptions (p. *jhana*, skr. *dhyana*)[20]. However, these absorptions can`t turn suffering or stress into ease or happiness in any lasting way. What practitioner of Buddhism has to do is to go through the insights in a directed manner. Ways to figure out this direction of insights is the mind training maps that I go through next.

In general, Buddhism has two basic versions of the mind training maps. If one is a Theravada practitioner, then her aim is to become an Arhat. This is described to happen in four distinct phases. Firstly, practitioner achieves the stream entry (p. *sotapanna*) where the insight into non-self happens. Traditionally described, with this insight practitioner leaves behind all hesitation towards Buddhas teachings and all attachment to beliefs. The second and third phases are called once-returner (p. *sakadagami*) and no-returner *(*p. *anagami*). Achieving these insights attachment into sense pleasures and ill-will vanishes. Term returning refers to the number of forthcoming rebirths or reincarnations. In the last fourth phase the practitioner becomes an Arhat. Arhats have reached nirvana and will not be born again into this world. How Arhats are usually described is that they are not bound by heavenly pleasure`s and they are not restless, self-satisfied, and ignorant in a Buddhist sense. (Harvey 2013, 28.)

However, through Mahayana, a new aim for the Buddhist mind training practice was born. Instead of becoming Arhat, the aim of Mahayana is to become a Buddha. This is because according to Mahayana view, only by becoming a Buddha the practitioner has a real chance to be beneficial for all living beings. Beside her own liberation, practitioners of Mahayana started to emphasize all-encompassing compassion and altruism. This fundamental motivation or attitude is called an awakening-mind (skr*. boddhicitta*). In the framework of rebirth or reincarnation, new idea is also introduced. Instead of not born again into this world and Mahayana practitioner vows to born again until every sentient being is liberated from suffering. (Blumenthal 2013, 86-87.)

[20] Meditative absorptions are divided into four subtle-material realms and four immaterial realms. In absorption practitioners mind is withdrawn from external senses and completely absorbed in the object of meditation. The idea behind absorptions is that attaining them practitioner temporarily overcomes specific hindrances by her force of concentration. Going through all first four absorptions, in the last one only tranquility of mind or one-pointedness (p. *ekaggata,* skt. *ekagrata*) is left and all hindrances are gone. Mastery of fourth realm is required for the cultivation of supranormal powers (p. *iddhi,* skt. *rdhhi*) or "siddhis". Then after mastery of four subtle-material absorptions comes four immaterial realms called: 1) infinite space, 2) infinite consciousness, 3) infinite nothingness, and 4) neither perception nor non-perception. Traditionally mastery of any absorption results in the rebirth in corresponding realm of each respective absorption. (Buswell & Lopez 2019, 383-384.)

Beside all-encompassing compassion another main idea of Mahayana in relation to mind training is the skillful means (skt. *upaya*). Blumenthal (2013, 87-88) explains this means there are numerous ways or means how Buddha can teach practitioners on their path to liberation from suffering. Skillful means has been used to explain the differences between Buddhist philosophies and mind training teachings. Variations are seen to be tools for people who have different capabilities to adopt teachings instead of inconsistency in the teachings themselves. From the idea of skillful means becomes the tradition to classify teachings into lower versions which are meant to prepare practitioner for the higher versions.

Within Mahayana a new mind training map was born. Blumenthal (2013, 96-97) presents that in this map the path of mind training is divided into ten grounds (skt. *bhumi*). The obstacles on the path of a Mahayana practitioner are split into two parts. These are negative emotions (skt. *klesava-rana*) and knowledge (skt. *jneyavarana*). From the Mahayana point of view, the achievement of Arhat can be seen to be in the area of the eight ground, where the negative emotions are liberated. The obstacles regarding knowledge are those that are removed in the achievement of the ninth and tenth grounds. But practitioner becomes really liberated only when she achieves the eleventh ground. Then boddhisattva turns into a living Buddha. However, I think it is important to note that there are also somewhat different interpretations of grounds, and the achievements can be and are in some cases categorized in different ways. Without going into any arguments about the grounds, main idea here to grasp is that from the viewpoint of Mahayana, becoming an Arhat is seen to be not enough. Next, I shortly describe how mind training is seen in the Vajrayana Buddhist schools of Mahamudra. As the abovementioned eleventh ground hints, In Vajrayana there are seen to be more grounds to cover than only ten or eleven.

4.5.2 GRADUAL PRACTICE AND POINTING TO THE NATURE OF THE MIND

There has been debate in Buddhism about the nature of the mind training or meditation. In the heart of this is a following question: is the mind training practice (or is it ought to be) sudden or gradual? My claim is that it is and ought to be both. Therefore, I will go through gradual mind training path and sudden insight or pointing to the nature of the mind in the same chapter, alt-hough these two are many times presented in a style that separates them from each other. In my way I hope reader can get a better sense that these two are best seen together as a one continuum.

In Mahamudra, the gradual mind training path is divided into four yogas. According to Dzogchen Ponlop Rinpoche (2003, 128-132), the four yogas (or phases of mind training) are called: 1) one-pointedness, 2) non-fabrication, 3) one taste, and 4) nonmeditation. In the first phase of one-pointedness which consist of concentration on meditation object, mind training practitioner starts to be able to concentrate without outer distractions. Because of this heightened concentration, practitioner starts to experience positive mind states that include bliss, clarity, and sometimes absence of thoughts. (Dzogchen, 2003, 128-130.) The one-pointedness practice can be understood to be a form of calm abiding, and the main purpose of this first phase is to develop a "tool" for the insight meditations. What this means is that calm and focused mind enhances practitioner`s ability to observe and study her own experience. This calming also includes the physical body, like all mind training practices inevitable do. Balance in the nervous system helps to get rid of excess excitation and excess laxity. (Thurman 1994, 55; Wallace 1999, 176.)

My own experiences of this first phase go somewhat similar with abovementioned. As a young man I felt deeply unhappy and depressed. Then first time I meditated with the guidance of an experienced teacher, I was able to relax my body and concentrate my mind and went into a very pleasant, blissful state. This experience hooked me into mind training practice. I started to do regular one-pointedness meditation on my own. As the clarity and good feeling grew little by little, I remember spending many moments after the practice simple looking at the world, like I was really seeing it for the first time. This happened because my attention shifted slowly from my racing thoughts and overwhelming feelings to my senses. I also started to learn to become aware of my own negative thoughts and general negative mood or attitude. Eventually this culminated into the point where I felt that all my ceaselessly continuous thoughts were just completely ridiculous. This realization lead into a full-on laughter that felt immensely good.

Then moving into side of insight, Dzogchen (2003, 113-114) divides the process of pointing out (the nature of the mind) instructions into three distinct phases that he calls: 1) showing the nature of the mind, 2) developing certainty in the nature of the mind, and 3) receiving the instructions pointing out the true nature of mind. In the first phase of this insight practice it is important that the practitioner have some ability to rest in a state of relaxed body, open mind, without outer distractions. Therefore, usually mind training practice in Buddhism starts from the calm abiding.

Dzogchen (2003, 113-114) continues that this deepening relaxation and concentration eventually lead into resting in a state of non-distraction. In this state it doesn`t matter anymore where concentration is pointed. Then, when non-distraction is sufficient, practitioner is lead to notice and see the clarity of the mind. After practitioner notices this, then clarity is learned to be noticed in the same way with less calm mind, with arising thoughts. When thoughts arise, practitioner recognizes the nature of the thought being that of non-distracted clarity, over and over again.

When I was doing my practice of one-pointedness I did not receive the first phase of pointing out instructions. If I`ve had, it would have probably saved some time and effort, because I would have had a better conceptual map where my practice is supposed to lead. Eventually after experiencing more and more one-pointed concentration, I started to realize that there must be more to mind training than only this kind of practice. However, at that time there was no-one to really guide me towards the next step. I remember becoming frustrated by some meditation instructors who could not answer my questions. Eventually with the help of different teachers and fellow spiritual seekers it started to dawn to me that after gaining enough concentration, and also clarity of mind, what I was next introspectively looking or searching for was myself. Who is the one behind this concentration and clarity. This pondering gradually led me to the second phases of gradual and insight meditation maps.

In the second phase of gradual mind training called non-fabrication practitioner gains an insight into non-self (Dzogchen 2003, 219). In this phase, the second insight practice begins. Here practitioner`s attention is directed to turn towards the sense of self. Practitioner is guided to search, in her own direct experience, an object that is the actual self. During this process it becomes clear to practitioner, in her own mind and body, that besides the thoughts that are about the self, there is no actual object of self to be found. The nature of the mind has never been personal, self has always existed only as a conceptual thought. (Dzogchen 2003, 116; Thurman 1994, 55.)

Although there may be different opinions among Buddhists on this issue, my claim is that if we look at the meditation maps of different vehicles of dharma, first insight into non-self in the Theravada map is the stream entry, and in the Mahayana map it is the first ground. This second phase of insight is especially connected to the Madhyamika philosophy (Dzogchen 2003, 128-130). As Thurman (1994, 61-62) points out, sometimes the experiential investigation into non-self can make

practitioner feel that she doesn`t exist at all. This is why Madhyamika philosophy is important before and after the insight into non-self. Continuing mind training practice with the help of Madhyamika practitioner eventually realizes that there is no inherent existence or non-existence at all to be found. Anything the practitioner can sense or experience in any way is relative, not absolute.

My own experiences of this phase and insight into non-self was somewhat dramatic (this may not be the case for someone else). After investigating the sense of self in direct experience in many ways, one instant I just "saw through" the sense of self. I couldn`t find myself anymore. The person I used to be seemed to vanish. This left me feeling like there is no-one home. This may seem frightening, but for me it was huge relief. My mind became less noisy, and the presence of immediate experience grew exponentially. However, it also became soon clear that this was not the end of the story. There was no-one who was feeling the suffering, but the suffering was still there (although not so intense anymore). I still felt unhappy and depressed, although it was clear there was nobody who was essentially the one who was unhappy and depressed. Important point that dawned to me was that now the identification was gone there was no obstacle to change. Who I seemed to be could no longer dictate in any way who I could become.

In third gradual phase called one taste the mind training practitioner experiences directly the non-dual nature of the mind. The practitioner "loses" the different taste of subject (self) and objects (thoughts and feelings). (Dzogchen 2003, 130-131.) This third phase in my view is especially connected to the Yogachara philosophy. After the sense of self is seen to be only conceptual construct, in the third phase of insight practice the attention is turned from the self into the contents of the mind. First practitioner learns to identify the selfless clarity of the nature of the mind. Then she learns to recognize that which comes from grasping, craving, or confused mind. Then she recognises this grasping, craving, and confusion over and over again, and "cuts" through it into nature of the mind. (Dzogchen 2003, 116.) Then comes the fourth phase that Dzogchen (2003, 131-133) calls non-meditation. In this fourth phase practitioner fully realizes the nature of the mind, and all habitual, emotional attachment and craving becomes exhausted. Also, at this phase, meditation becomes slowly effortless. Seen this way, Dzogchen (2003, 123) argues that the whole project of mind training is to recognise the nature of the selfless clarity of the mind and then fully realize it. Eventually this realization feels like an open space of awareness that rests on its own unchanging nature.

My experiences of the third and fourth phase was somewhat straightforward. In these phases I learned tantric meditation and yogic practices and had initiations into different teachings from my longtime mind training teacher. I practiced these teachings regularly and diligently over maybe eight to ten years. Although I am not anymore student of the same teacher, I feel very grateful to all the teachings and support I received from him and from all my fellow practitioners. With this simple description I don`t mean that these phases were easy. They were not. My practice included many deepening insights, many different obstacles, and lots of feelings of frustration, but also success and increasing happiness and well-being. However, in the end all the insights felt like they were kind of extension or addition to the first insight.

Instead of the first insight into non-self, my experience of achieving the open space like unchanging nature of the mind was not dramatic at all. One summer morning I just felt something was permanently different. The total realization of the nature of the mind was just there, all the time. It became effortless to be fully present and not sink into rumination or any other absorption anymore. And also, most importantly, all depression was gone. My feeling is that this insight or realization is the end of the fourth phase like Dzogchen Ponlop describes it.

However, this is not the end of the story. After the abovementioned, for two to three years I did not practice meditation regularly. I just meditated now and then, usually aiming to relax from study or work. All the time I dedicated my practice to the benefit of all sentient beings, and now and then (mostly spontaneously) practiced the so-called rainbow body teachings which I had learned before. Then suddenly and to my surprise, the “practice” moved forward. As I earlier described, already in Mahayana the eleventh bhumi is sometimes seen as achievement of Buddhahood. As one of the most known Vajrayana Buddhist teachers of the nineteenth century Patrul Rinpoche (1808-1887) argues, when the eleventh bhumi is fully realized, there is no further training to be done on the view of Dzogchen (Patrul Rinpoche, 2007). However, in Vajrayana, there are also said to be additional bhumis beyond eleven, usually two more. It is also argued that the actual Buddhahood in Vajrayana is the achievement of the thirteenth bhumi. One example of this is Jamyang Khyentse Chökyi Lodrör`s (1893-1959) text Cymbals of the Devas. In Praise of the Lord of Sages, Peerless Teacher to All, Including the Gods. (see: Jamyang Khyentse 2022.) These last practices, that are beyond ten bhumis are usually called rainbow body. I will not speculate here what these mean because I have (yet) no sufficient experience on this area.

Now I have elaborated little on my own experience of Vajrayana Buddhist mind training path. The reader can of course decide herself if she believes my story or not. But besides my experience, it could be useful to see what a known Buddhist meditation master say about his experience. For this, I use as an example the probably most famous writing of Longchenpa called The Basic Space of Phenomena (tib. *Chöying Dzöd*). In this text Longchenpa describes his accomplishment of the nature of the mind in the following way:

> ”There are no gods to worship, no demons to exorcise, nothing to cultivate in meditation – this is the completely “ordinary” state. With this single state of evenness (…) there is oneness, a relaxed and unstructured openness. How delightful – things are timelessly ensured without having to be done, and being free of effort and achievement, you are content.” (Longchen 2001, 77.)

In his text Longchenpa describes gods and demons. I argue that for the Longchenpa, it was already clear that gods and demons were only ever inside his own mind. When I write later about the Tibetan Book of the Dead, I will argue that this “psychological” interpretation is not only mine as a modern Western person but was already there in the Buddhism long time ago.

Now there is a picture that connects the Buddhist philosophy and mind training together, and also some kind picture of what mind training path can look like. It is time to investigate the Buddhist philosophy of mind. Before going into it, I hope one thing has become very clear. The Buddhist view of non self is much more complex and nuanced than simply arguing no self exists.

4.6 BUDDHIST PHILOSOPHY OF MIND: IDEALISM OR DUALISM?

In modern Western philosophy of mind, the metaphysical views about the nature of reality can be roughly divided into three main positions. These are materialism or physicalism, idealism, and dualism. In the beginning of the chapter three I presented what physicalism means in the context of this thesis. It was also seen that Letheby´s naturalistic mechanism of psychedelic therapy is physicalist. The opposite viewpoint to physicalism is idealism. I will define what is meant by idealism in this thesis by dividing it into two versions mirroring the manner that Letheby divides naturalism.

Following Guyer and Horstmann (2022), idealism can be seen as either ontological or epistemological. According to the ontological idealism, fundamental nature of reality is something mental and it can be described, for example, as spirit or consciousness. In ontological idealism the existence of anything is always dependent on the mind. Paradigmatic example of Western ontological idealism is Georg Berkely`s (1685-1753) philosophy.

In epistemological idealism it is admitted that there exists something outside the mind or consciousness which is not dependent on the mind. But the epistemological point is that everything one can know about that outside existence is always constructed by mental activities. Paradigmatic example of Western epistemological idealism is Immanuel Kant (1724-1804) and his transcendental philosophy. Kant can be understood to limit the ontological idealism in a following way: The way things seem to a human is dictated by the attributes of the mind, but besides this, there are things-in-themselves beyond the mind. (Guyer & Horstmann 2022.) The last of three options, dualism, is a view in which physical and mental are seen to be two different substances. Probably the most famous dualist in Western philosophy is Rene Descartes (1596-1650), who divided everything that exists into extensional matter (*res extensa*) and non-extensional mind (*res cogitans*).

In Western philosophy, metaphysical dualism is usually seen problematic. If there are two separate substances, then there has to be an explanation of how the non-physical mind cause something to happen in the physical brain, and why does an injury to the brain affect the conscious experience (sometimes in a very dramatical way). Philosophical dualism leaves these questions unanswered. (Revonsuo 2018, 31-32.) But it is also important to note that beside abstract metaphysics, dualism may also be problematic from the psychological point of view. For example, Petrement (2022, 38) argues that Descartes gave the non-extensional mind total freedom over the extensional body. He saw the external world as mechanistic and regulated by absolute determinism. It is known that depressed people often describe themselves disconnected and feeling isolated, like being trapped in the mind detached from their bodily senses. Petrement`s point is that this experiential disconnection is not a normal state of things. This is because seen from the perspective of our own subjective experience, nobody lives and have never lived in a mechanistic world. Instead, we live in a world of meaning, feeling, and aspirations. Therefore, mind-body dualism may even be seen as one reason behind depression in the modern world.

Then what about the philosophy of mind in Buddhism? Probably one of the most anti-physicalist ideas in Buddhism is the rebirth or reincarnation. This is especially true in the case of Tibetan Vajrayana Buddhism where there are thousands of reincarnated *tulkus*[21] (Thurman 1994, 10), like for example all the fourteen Dalai Lama´s of the Gelug school. Hayes (2013, 395-396) argues that if Buddhists believe in rebirth or reincarnation, it makes no sense at all if the existence is not understood to be dualistic. How could the mind or consciousness transfer into a new body if it is not fundamentally detached from the physical body? As was already seen in the section on Buddhist philosophy and mind training, reincarnation and rebirth are very much part of Buddhism. However, there are different views how reincarnation or rebirth is seen and what a Buddhist practitioner should aim to do about it, and there are different ways reincarnation or rebirth is argued to be true. I will next present two of the probably most common arguments.

Firstly, there is anecdotal cases. For example, Dalai Lama (2005, 132-133) argues that there are people who claim to remember their past lives. Obvious problem for this is that subjective memories hardly seem enough evidence for the existence of reincarnation or rebirth. A lot of studies have been done concerning the nature and workings of human memory and it´s neurobiology. As Solms & Turnbull (2002, 149-167) argue, there is lot of diversity in memory and anatomical distribution of memories in brains. In general, memories seem to be encoded all over the brain in connections between vast assemblies of neurons. Researchers have however differentiated between three types of memory, which are usually called semantic, procedural, and episodic.

Most interesting type of memory concerning the case of reincarnation or rebirth is the episodic. Solms & Turnbull (2022, 160-166) argue that episodic memory is what most people think of as proper memory. It is the bringing back to awareness the previous happenings of life. And exactly these kind of memories are those that define one`s life. The most important anatomic brain structure concerning episodic memories is the hippocampus that lies in the inner surface of the

[21] Tulku usually means a reincarnation of a *lama* (teacher). *Lamas* take rebirth in the world because they have control over the death/rebirth process and can choose what to do. In the spirit of Boddhisatva ideal of Mahayana, *lamas* want to be reincarnated again as a human being in order to help all sentient beings. Tibetan practice of identifying children as reincarnated *lamas* may date from eleventh or twelfth century, and today all sects of Tibetan Buddhism do it. Also interesting to note, it is possible that there is more than one reincarnation of one *lama*, for example three: incarnations of body, speech, and mind. This identification of reincarnation became a central component of Tibetan society, where spiritual and material authority is passed from one generation to another. (Buswell & Lopez 2014, 847.)

forebrain within temporal lobe. The importance of hippocampus can be illustrated with a short story. The most famous clinical case of behavioural neuroscience is the case of person known as HM. HM was a patient who suffered from intractable seizure disorder that had its epicenter in hippocampus. In 1950`s, a neurosurgeon operated HM and removed the whole hippocampus. After the operation HM never had any episodic memories. (Solms & Turnbull 2022, 160-166.)

The above presented story shows that some brain structures seem to be necessary for some types of memories. The idea that there could be episodic memories floating around without brains or bodies seems quite absurd. One possible answer for memories of reincarnation or rebirth is false memory or imagination. According to American Psychological Associations, a false memory is a well-known phenomenon where a recollection of past event is distorted, or that the person has a memory of past event that never actually happened. There are lots of known cases where someone is highly confident that they remember the truth, but evidence shows that they do not. False memories have even become a problem in court rooms, where some adults have claimed to recover being sexually abused as children without evidence. (APA, 2024.) Newer studies suggest that besides episodic memory, hippocampus also plays a fundamental role in imagination (see: Comrie et. al. 2022). From there it can be argued that maybe memory and imagination are "two sides of the same coin". For example, Wickelgren (2023) seems to make a case in favour of this interpretation. It may therefore be entirely possible that someone could imagine reincarnation or rebirth instead of actual past life, and not know the difference herself.

Secondly, there is a logical claim. Dalai Lama (2005, 125-132) explains how rebirth or reincarnation can be understood logically. He claims that in Buddhism subjective experiences can`t be reduced to physical objects. Therefore, mind has to have a status that is separated from the matter. Then he argues that following Dharmakirti[22], when everything originates dependently from the network of causes, the first moment of consciousness has to be preceded by another moment of consciousness. A substantial cause of one conscious moment is another, earlier conscious moment. Logically all this seems of course possible. However, the obvious problem is that anyone can argue that rebirth is a logical possibility, but from logical possibility doesn`t follow that rebirth happens in the actual world where we live in.

[22] Dharmakirti (600-670) was influential Indian Buddhist logician. He´s texts become a subject of later study especially in Tibet. (Buswell & Lopez 2014, 246-247.)

One way to get out of metaphysical dualism is to ask does metaphysics really matter. Hayes (2017, 398) suggests that Nagarjuna´s Madhyamika holds a position that philosophy of mind as a speculative enterprise only comes in the way of a serious mind training practitioner. This seems to also be the view of one of the famous eighty-four Mahasiddhas called Shantideva[23], who thinks that reality just can`t be reached through the power of intellect. Maybe the whole philosophy of mind is simply a distraction that comes in the way of achieving alleviation or liberation from suffering. Also, as I mentioned before, in Vajrayana Buddhism the view is that the whole Buddhist soteriology can be achieved in one lifetime. From this follows that if one lifetime of mind training practice is enough, is there any need for a belief in rebirth or reincarnation? If it is accepted that the main goal of Buddhism is the liberation from suffering and it can be achieved in one lifetime, then the belief of reincarnation or rebirth seems to be irrelevant.

It is hard, or maybe impossible, to find a definite metaphysical Buddhist position that would have general and wide acceptance among all Buddhists. Therefore, I used the tactic of simple negating some possible positions. However, only negating views may feel unsatisfying. It would be nice to have some kind of positive Buddhist position on the nature of reality even if the issue of reincarnation or rebirth is "taken out of the picture". That is why next I turn to phenomenology and enactive view.

4.7 NON-DUALISTIC PHENOMENOLOGY

My claim is that in the light of the Western philosophy of mind, Buddhism can be seen as a distinct form of phenomenology, a non-dualistic phenomenology. However, this non-dualistic phenomenology is different from the more traditional Western forms of phenomenology. In a very general and descriptive sense, phenomenology is the study of structures of consciousness as experienced from the subjective point of view (Smith 2018). There are two main points how Buddhist non-dual phenomenology differs from the Western phenomenology. First one is that the aim of Buddhist philosophy and mind training is not only to study the subjective experience, but to chance it. Because of Buddhist soteriology, the aim of non-dualistic phenomenology is a subjective

[23] Shantideva (685-763) was a Buddhist monk in Nalanda. He was probably not very liked, and legend tells that he flew into the sky and disappeared when he exposed his text called "The Bodhisattva Path" (skt. *Bodhisattvacaryavatara*) to other monks. (Buswell & Lopez 2014, 774.)

experience without suffering. At this point, this argument sounds pretty obvious. Second difference is that when talking about non-duality, the whole idea of what non-dualism means is different in Western phenomenology than in Buddhist non-dualism. Before exploring and explaining this second difference, I will clarify what I mean by phenomenology in this thesis.

Some authors and philosophers today have made claims that phenomenology in general must be only descriptive. This means that it can only concern question of what is lived subjective experience like, and not take any stance towards the nature of reality. (Zahavi 2019, 900.) However, this kind of claim is quite dubious from the historical point of view. For example, Zahavi (2019, 902-903) illustrates a point from the philosophy of the founder of phenomenology, Edmund Husserl (1859-1938). The fundamental method of Husserl`s phenomenology, and therefore maybe every form of Western phenomenology, is the epoché. Epoché as a word comes from Greek and it means suspension of judgement or withholding assessment (Frank et. al. 2024). Zahavi (2019, 902-903) argues that the real meaning of epoché is to stop the automatic realistic belief that there is a world that is independent from the mind.

Keeping abovementioned in mind, what is then the relationship between phenomenology and idealism? If it is accepted that epoché is fundamental to phenomenology, then it seems that phenomenology can only be classified as either ontological or epistemological idealism. Therefore, it also seems that phenomenology does indeed take a stance towards the nature of reality. However, as Zahavi (2019, 903) argues, Husserl claimed that phenomenology is the final form of transcendental philosophy. The purpose of epoché is not to exclude the reality completely out of the research, but to just suspend the dogmatic automatic realistic belief. Husserl`s aim was to find a way to study how the reality shows up for the subject. In another words, by doing the epoché, attention is directed to how things show up within conscious awareness, not just to objects in the external world "out there". Epoché requires meta-awareness: attention to awareness and objects of awareness both. (Frank et. al. 2024.) With these remarks, the way phenomenology is seen here reminds more of epistemological idealism than ontological idealism.

As I already argued before, in this thesis Buddhist Yogacara non-dualism means that the split between subject and object is inside the dependently originated mind. Therefore, Yogacara is best seen as a form of epistemological idealism because it does not deny that there exists something outside the mind or experience. It is also important to note here, as Frank et. al. (2024) argues that some spiritual or religious traditions claim that "pure consciousness" only depends on itself and nothing else, and this makes it ground of all being. This claim can arise from the experience where there seems to be only conscious awareness and no objects of awareness at all. However, how something appears to one doesn´t necessary reveal how things really are. From "pure consciousness" experience one cannot make inference to metaphysics. In Yogacara, "pure consciousness" experience can be seen to point at a non-duality of subject and object, but to not point into a nature of reality, because ultimately also the "pure consciousness" experience must be dependently originated.

Then coming back to my claim about the difference between non-dual in Western phenomenology and Buddhism. At the revised edition of *The Embodied Mind* (2016), Evan Thompson and Eleanor Rosch has written new introductions twenty-five years after the original book was published. In her introduction Rosch (Varela et. al. 2016, xxxix-xl) argues that Buddhism goes beyond Western phenomenology when another mode of knowing that is not based on the subject and object, a non-dual knowing (skt. *vidya*, tib. *rig pa*) is presented. This knowing is the opposite of ignorance (skt. *avidya*, tib. *ma rigpa*).

According to Rosch (Varela et. al. 2016, xxxix-xl) in Western phenomenology, the mind that doesn`t make distinction between subject and object is seen as a mind in pre-reflective state. What this means is that in usual situation person is actively engaged in the world. Then something in that pre-reflective state forces the person to reflect on the experience. The distinction in Western phenomenology between the subject and object is made from this reflection. But in Yogacara Buddhism, the distinction between subject and object is not a matter of abstract reflection. When person is actively engaged in the world, that person is seen to be in a state of absorption. This means that the person is not (fully) present. What Buddhist mind training aims to achieve is a continuous knowing where the mind is not absorbed, but present. If the mind is present all the time, then the present experience is simply self-known, and there is no distinction between subject and object.

The point Rosch made above is the same as I presented in the section on Vajrayana Buddhist mind training. The knowing Rosch points to is the nature of the mind. Knowing is the experiential non-duality where subject-object distinction is gone and one does not get absorbed anymore into day-dreaming or rumination, or into other mindless or unaware state.

To iterate the two main points of this section: 1) Buddhism aims not only study the subjective experience or its conditions and possibilities, but to also change it, and 2) non-dualism in Western phenomenology do not point towards the same thing that Buddhist non-dualism does. However, as metaphysics in Buddhism is hard to figure and the dualist metaphysical view is very unsatisfying, I claim that Buddhism is best seen as a form of non-dual phenomenology. Next, I leave phenomenology and philosophy of mind and present my criticism towards Letheby`s philosophical view behind naturalistic mechanism of psychedelic therapy.

4.8 PREDICTIVE PROCESSING AND PHENOMENOLOGY

My critique of Letheby`s view aims at predictive processing framework and it´s connection to naturalism, and it originates mainly from Dan Zahavi. According to Zahavi (2018, 48-49), the central idea of predictive processing is that the world of experience is a representational construct. As was seen before, this is also what Letheby argues. Zahavi (2018, 48-49) points out that from this follows that it is impossible to compare our representations with the actual external world. This can be further elaborated by an example of how to think about colours. Some say that science reveals there really are no colours in the world. The colour exists only as an experience created by the brain. What colours really are, is electromagnetic radiation of certain wavelengths. Frank et. al. (2024) argues that in this way science explains away the “subjective illusion of colour”.

Fitting with the themes of this thesis, Seth (2021, 122) admits having experimented with LSD. About the psychedelic experience and it`s aftereffects, he writes:

> “For several days afterwards I had the impression I could still see “through” my perceptual experiences, experiencing them – at least partially – as the constructions they are” (Seth 2021, 122).

It is important to note here that predictive processing does not claim that the external world doesn`t exist, but it claims that the representational filters prevent person from seeing how the external world really is. This is, as was already stated earlier, because what we perceive is always a representational construct (Zahavi 2018, 49.)

From the abovementioned claim can be seen that ideas behind predictive processing remind ideas of Kant`s transcendental idealistic view, and this is where philosophical problem begins. As Zahavi (2018, 50-51) points out, one of the names that keeps coming up in the philosophical literature on predictive processing is physicist and physician Hermann von Helmholtz (1821-1894). For example, Seth (2021, 81) mentions Helmholtz as an important figure in the story of predictive processing. Zahavi (2018, 50-51) notes that mainly through his studies on nervous systems, Helmholtz presented as a scientific fact the Kant`s basic claim:

> "…we can`t have cognition of object as a thing-in-itself, but only (…) as an appearance." (Zahavi 2018, 51.)

Helmholtz argued that science reached the same understanding that Kant reached a prior earlier: perception can`t allow one to know the world directly (Zahavi 2018, 51; Seth 2021, 81). But Kant`s transcendental view was criticised later by many philosophers, especially German idealists and G.W.F. Hegel (1770-1831). According to Hegel, Kant`s thing-in-itself expresses the object only as an abstraction, because thing-in-itself is removed from all sensations and thoughts of it. Therefore, the thing-in-itself is completely empty. (Zahavi 2018, 51-53.) This criticism made by Hegel was then taken further by other philosophers, but I will not go into more historical details here.

However, the important point here is to see that the abovementioned leads into a confusing situation. As Zahavi (2018, 53-54) argues, once representationalism is accepted, it is extremely hard to hold on to the external world. The reason for this is that if the world of experience is a brain-generated construction, how could it be possible to ever *know* that scientific theory captures external reality in a way that it really is? And if science is supposed to tell us how the world really is, how exactly are scientists able to transcend the brain-generated construction?

One possible way to go around these two questions is to argue that human cognition is limited, and science is simply our best bet. I think this is what Letheby argues with his methodological naturalism. Although Letheby uses the phrase methodological, he writes that:

> "Methodological naturalists recommend that we take this epistemological lesson seriously and treat the deliverances of the sciences as our starting point and best guide to what the world is really like." (Letheby 2021, 34).

But Zahavi (2018, 54) points out that thinking this way misses the philosophical point. If predictive processing claims that objects of perceptions are brain-generated constructs, in order to take it seriously it has to be consistent. It is obvious that empirical knowledge about the brain has to be perceptually informed. But if the perception can`t be trusted to tell what the world is really like, because perceptions are brain-generated constructs, then this has to hold also with the empirical knowledge about the brain. Then Zahavi asks, how can skepticism towards perceptual experience not include the perceptual knowledge of the brain itself? Simple answer is that it can`t.

This line of critique is also seen in Frank et. al. (2024), where they claim that the predictive processing framework is actually self-undermining. This is because the physical brain that is supposed to be "objective" outside the model of predictive processing turns into a content inside this model. It means that in this model, nobody is actually studying the physical brain. The brain that is under study is a hidden unobservable something that is just called "the brain". This way predictive processing theory loses its physical bases, because there is no way to establish what outside reality is beyond the model. From this follows the fact that putting predictive processing framework and naturalistic view together is epistemologically quite confusing.

If abovementioned philosophical problems of predictive processing framework are true, what could be a better view to think about the nature of reality? According to Zahavi´s (2018, 56-58) interpretation of Husserl, Husserl rejected the Kant`s idea of things-in-themselves. Husserl argued that there is no absolute reality that is independent from the mind in a way that some objectivists or realists may claim. Therefore, Husserl`s view can be said to be anti-representationalist. Zahavi

then argues that if phenomenology is seen this way, then phenomenology becomes an ally of an enactivist view of the mind. But what does the enactivist view of the mind mean?

The enactive view of mind or cognition started to develop over 30 years ago from the first publication of the book *The Embodied Mind* (2017) (van Es 2024, 1-2). Today there are many different enactive ideas and theories, but the thing that unites all of them is that they share a view where cognition is seen to emerge from, or to be constituted from, sensorimotor activity (Shapiro & Shannon 2024). More closely, according to van Es (2024, 5), the enactive view holds four main ideas about the cognition. Firstly, the body of the agent is understood in terms of both its material constitution and its social constitution. Secondly, those processes that constitute agents are self-producing and self-individuating organizations relations to one another. Thirdly, all those abovementioned processes are path dependent. This means that the processes can be understood through historical development, through historicity. And fourthly, cognition is interactive.

How then does the enactive view differ from computational view of mind or cognition? van Es (2024, 5) argues that enactive view is in opposition to computationalism, because in computationalism it is seen that brain needs to compute rich internal representation to devise action plan from the stimulus input (van Ess, 2024, 5). But in enactive view cognition is seen as an enaction that brings forth the world and a mind through embodied action. Not through a representation of an independent, outside world. (Thompson 2020, 75 -76.) Therefore, enactive view could also be seen as anti-representationalist.

There is still one more issue about Letheby`s view that I want to mention. It comes from his notion of mind/body identity. In general, mind/body identity theory holds that states and processes of the mind are identical to the states and processes of the brain. This doesn`t mean that mind is identical to the brain, but it says that experiences literally are brain processes, and not just correlated with brain processes. (Smart 2022.) Seen from the enactivist viewpoint, the idea of mind/body identity is problematic. As Thompson (2020, 134) argues, locating the mind inside the brain gets the boundaries of the mind wrong. Thompson gives an illuminating analogy of the problem of mind/brain identity theory with the flight of the bird:

> "A bird needs wings to fly, but the bird's flight isn't inside its wings; it's a relation between the whole animal and its environment. Flying is a kind of embodied action. Similarly, you need a brain to think or to perceive, but your thinking isn't inside your brain; it's a relation between you and the world… …you need a brain to have a human mind, but your mind isn't inside your brain; it's a relation between you and the world, including society and culture." (Thompson 2020, 123.)

Now that I have argued in favor of enactivist view against Letheby`s endorsement of physicalism and computationalism, how does Buddhism connect to all this? It is obvious that the philosophical backbone of *The Embodied Mind* (2016) comes from the Madhyamikas emptiness (skt. *sunyata*), or how it is translated in the book, groundlessness. Emptiness is usually presented in a negative way as a lack of (inherent existence), as I also did in this thesis. But emptiness/groundlessness can also be understood and presented as well in a positive way: whatever there is, comes or springs from dynamic relations without any substantial ground (van Es 2024, 7).

Besides existence, groundlessness or emptiness can also be seen through conceptuality. Thompson (2020, 73-74) argues that Madhyamika view emphasize conceptual dependence. What this means is that all phenomena depend on how the mind conceptualizes things. In this way the lack of intrinsic existence means that the nature of phenomena depends on how it is identified via a conceptual system. From this follows that knowledge is not giving us information about how the world is in itself apart from the mind. Seen this way knowledge lacks an absolute foundation. Therefore, mind has no other ground than its own history. (Thompson 2020, 73-74.) This is the clarification of the idea of historicity that I mentioned before in a nutshell.

In this section I went through the problems of Letheby`s view. In essence, the main problem is that naturalism/physicalism and predictive processing doesn`t really seem to fit together. If one takes a naturalist/physicalist view and supplements it with predictive processing, this seems to lead into a conflicting and confusing picture. Therefore, maybe enactivism or Buddhist Madhyamika could be a better philosophical starting point when thinking about the nature of reality. In the next part I change the subject to the connections between psychedelics and Buddhism.

5. PSYCHEDELIC BUDDHISM

In the final part of this study, I focus on the connections between psychedelics and psychedelic therapy with Buddhist history, philosophy, and mind training. In the first chapter I present answers to two questions: Is there a historical connection between psychedelics and Vajrayana Buddhism? And are there any connections with Buddhism and psychedelic use in the modern Western world? In the second chapter I explore mainly through empirical studies those people`s opinions who do psychedelics and Buddhist mind training at the same time how they think about the relationship between these two. In the third chapter I criticize Letheby`s view of mindfulness, and also some ideas behind mindfulness studies in general. In the final fourth chapter I present the idea how Buddhist philosophy and Vajrayana Buddhist mind training could help guide psychedelic therapy.

5.1 CONNECTION BETWEEN PSYCHEDELICS AND BUDDHISM

Rig Veda (1500-1000 bce.) is the oldest known religious text of India. In total of its 1 028 hymns, 120 ones are devoted to the virtues of the god called Soma, and at the same time preparing Soma. (Jesse 2015.) In first glance this may seem odd, but Crowley (2019, 3-5) argues that it is not. He thinks that Soma is a psychoactive drink made from a plant and the god of the plant both at the same time. Crowley (2019, 252-255) also argues that all the most important Indian gods or deities come from the apotheosis of psychedelic plants. Myths of these gods or deities include the properties of these plants in the symbolic form. For example, the well-known Hindu god called Siva was a psilocybin mushroom, and the precursor of Siva called Rudra was a fly-agaric mushroom.

According to Crowley (2019, 3-5), Soma also connects to Vajrayana Buddhism. He argues that Sanskrit term Soma means “juice”, but in a more poetic language it is also called immortality (skr. *amrita*). This name *amrita* can be found from many Vajrayana Buddhist texts and many Vajrayana Buddhist meditation deities also have *amrita* as part of their name. *Amrita* is also visualized in many Vajrayana meditation techniques and almost all early Vajrayana Buddhist masters are pictured holding a skullcup[24] that is full of liquid *amrita*.

[24] Skullcup (skt. *kapala*) is made from the cranium of a human skull. For a Buddhist practitioner it can be a constant reminder of death. (Buswell & Lopez 2019, 417-418.)

However, problem is that nobody knows the real identity of Soma despite scholars have proposed many different plants (Jesse 2015). Ethnomycologist and writer Robert Gordon Wasson (1898-1986) has argued that Soma is fly-agaric mushroom and Aryans brought it with them from the north to the Indian Indus Valley. Wasson noted the parallelling passages of the Rig Veda and the widespread Siberian shamanistic practice of drinking the urine of a reindeer or a human who had consumed fly-agaric. (Maillart-Garg & Winkelman 2019, 89.) Why fly-agaric is used this way is because it´s muscimol passes through a human or animal body with only small part of the dose metabolized. Therefore, the urine of the mushroom eater is still potent for up to five more doses. Of all the psychoactive plants known to have been used by humans, fly-agaric is the only one that have been used in this way. The potency of the mushroom eater`s urine was well known by Siberian shamans, but also by some native tribes of North America. (Hajicek-Dobberstein 1995, 106.)

How then fly-agaric is connected to Vajrayana Buddhism? Some detailed indirect evidence to support Vajrayana Buddhist fly-agaric use comes from the famous stories of the eighty-four Mahasiddhas. First story that I present concerns an Indian Mahasiddha called Karnaripa and his master Nagarjuna[25]. Karnaripa was a learned scholar and principal in Nalanda, but despite this he lacked the insight into the nature of the mind. Karnaripa left Nalanda to search Nagarjuna and found him in the forest collecting plants. He asked Nagarjuna to teach him. Nagarjuna agreed and gave Karnaripa an initiation and meditation instructions. After encounters with “tree goddess” and finding “delicious food” under the birch tree (known place for the fly-agaric to grow), Karnaripa and Nagajuna came to the conclusion that they have to get some elixir. After that there is a description of Karnaripa urinating into a full water pot turning the liquid into an elixir or *amrita*, and then giving it to Nagarjuna. (Hajicek-Dobberstein 1995, 103-106; Crowley 2019, 129-131.) In this story Nagarjuna also declares that because of the potence of Karnaripas urine, the insight into the nature of the mind has arisen in him (Hajicek-Dobberstein 1995, 106).

[25] Nagarjuna mentioned here is not the same Nagarjuna that started the Madhyamika school and was introduced earlier, but a later tantric master and writer who lived in India around 7th or 8th century and had many disciples (Hajicek-Dobberstein 1995, 102; Buswell & Lopez 2014, 561; Crowley 2019, 129).

Another story concerns two other Mahasiddhas from Tibet called Milarepa and Gampopa. Gampopa was a learned physician who became a Buddhist monk after his wife died. When he heard stories about Milarepa, he immediately wanted to find him. Eventually Gampopa found Milarepa from a remote mountain. He asked Milarepa to teach him and offered Milarepa tea as a gift. Before drinking the tea, Milarepa urinated into the tea pot, making it "extraordinarily delicious." (Crowley 2019, 190.) Here again we have indirect evidence of fly-agaric use. After Gampopa drank the tea, Milarepa initiated him into a certain meditation practice. Although Gampopa received many more initiations from different meditation masters in his life, he considered this as most profound and meaningful initiation he had. (Crowley 2019, 190.)

Especially taking into consideration the abovementioned textual evidence, it seems probable there has been some psychedelic substance use in Vajrayana Buddhism. There is a lot more detailed indirect evidence about the connection between Vajrayna Buddhism and psychedelics in Crowley`s book *Secret Drugs of Buddhism. Psychedelic Sacraments and the Origins of the Vajrayana* (2019), but I don`t think it necessary to go through all of it. One important point to bear in mind is that I do not claim that psychedelic substances are behind all Indian spirituality and religions (although this is an interesting claim), or that Vajrayana Buddhism came to be only because of psychedelics. My only aim was to show that there is some historical connection between Vajrayana Buddhism and psychedelic substance use.

Then the second question that was set in the beginning of this chapter concerns psychedelics and contemporary Western Buddhism. As Buddhist author and teacher Stephen Batchelor (2015) points out, it is undeniable that in the 1960s, significant proportion of those in the West drawn to Buddhism were experienced with psychedelics or some psychoactive substances. On the other hand, Buddhist scholar Rick Fields (2015) reminisces that in the 1960s when Zen meditation halls in several North American cities were flourishing, many of the newcomers who came to these halls were turning to meditation after initial psychedelic experiences. Fields also gives one anecdote from a Zen teacher Robert Aitken Roshi to back his claim. Aitken has said that when he opened meditation practice hall in Hawaii in 1967, virtually every youngster who came to knock on the door where familiar with some psychedelics.

According to Fields (2015), 1960s was a golden era for Zen in United States, but in 1970s Vajrayana Buddhism changed the scene. The hallucinogenic visual part of the psychedelic experience was instantly connected to the colourful radiant deities that was pictured in the Tibetan art[26]. This connection deepened when the Tibetan Book of the Dead (tib. *Bardo Thödol*) become more widely known, because this visionary text and some aspects of psychedelic experience closely reminded each other. Tibetan Book of the Dead explains the visions of those peaceful and wrathful Buddhist deities that can be seen in meditation states, and also appear to each of us when we die. In general, the idea is that more emotions one feels, the more intense and wrathful these visions and deities are. Bardo Thödol advises to maintain detachment when confronting these deities, because they are only projections of our own mind. (Crowley 2019, 19.)

Thurman (1994, 125-132) argues that the main advice The Tibetan Book of the Dead gives is that when one dies, one has to recognize the nature of the mind (or clear light, or buddha-nature, or "stainless consciousness"). Only this is enough. To recognize the nature of the mind, one must not cling to one`s own visions and then go through the instinctive fear (of death) remaining in ease. It is also advised that dying one should meditate on their own deity, which is not real, but only apparent like the moon in the water. Tibetan Book of the Dead is the teaching for attaining Buddhahood without meditation, only by understanding (Thurman 1994, 151-152). However, according to Thurman (1994, 165), those who have recognized the nature of the mind through meditation practices while alive are in good position to be instantly liberated when the death happens.

Although I argued earlier that liberation from suffering does not mean that one has to believe in rebirth or reincarnation, the idea that consciousness remains after physical body dies is definitely in Vajrayana Buddhism. Thurman (1994, 35-37) argues that in the view of Vajrayana Buddhism human psychophysical complex has three different "levels": gross, subtle, and extremely subtle. Gross body is physical, and it starts from birth and ends in death. Gross mind is said to correspond with six consciousnesses. Subtly body can be seen to correspond with nervous system. Human nerve channels are seen to transmit energy, and this vast pathway system is strung together by three central channels. Subtle mind has three states: luminance, radiance, and imminence. However, without meditation and yoga practice, these three are mixed with unconscious instincts.

[26] Example of this, see the "wheel of life" picture in appendix A.

The extremely subtle body is usually called indestructible drop. It is seen to be located at the center of the hearts so called “energy wheel” (p. *cakka*, skt. *cakra*, tib. *`khor lo*). Extremely subtle mind is the clear light. At this level, the continuity of consciousness is said to move from one life to another. However, this consciousness constantly changes never staying the same and it is beyond all ignorance, uncreated by anyone or anything. (Thurman 1994, 36-41.) As was noted before, in Buddhism existence has no beginning and no end. From the viewpoint of third-person science, as long as the hard problem of consciousness remains unsolved, this kind of claim is only speculative. But from the subjective, first-person viewpoint this claim makes perfect sense. Since one can`t experience nothing, meaning a total lack of any experience, therefore there is no such thing as nothing. Nothing just doesn`t exist.

Coming back to The Tibetan Book of the Dead, the connection between it and psychedelic experience was also noted by Timothy Leary. Leary, German born psychologist and writer Ralph Metzner (1936-2019), and American born psychologist and writer, who is perhaps better known as spiritual teacher Ram Dass, Richard Alpert (1931-2019) wrote a book called *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* (1964). The original *Bardo Thödol* was meant as a guidebook for a dying person to achieve liberation during the death process. However, Leary`s and others version was reconfigured in a way that actual physical death was replaced by ego dissolution experience under psychedelics. (Fields 2015.) Crowley (2019, 19-21) argues that when he personally became experientially familiar with psychedelic experience and the experiences described in the Tibetan Book of the Dead, he could clearly see the connection.

Besides well-informed opinions of experts and some anecdotes that I presented above, there has also been empirical surveys about the modern-day relationship between Buddhism and psychedelic use. However, as psychedelics are still strictly outlawed drugs in almost all countries of the world, it is really hard to have accurate data of how many psychedelic using Buddhists there actually are (Osto 2016, xxi-xxii). Despite this limitation, next I shortly present some data from four different empirical inquiries about the relationship of Buddhists and psychedelic use.

First evidence of Buddhists using psychedelics comes from a popular Buddhist magazine called *Tricycle: The Buddhist Review*. Their poll, done in 1996, had 1 454 responses. The results were that 89 % of those were engaged in Buddhist practices, and 83 % said to have used psychedelics. Over 40 % answered that their interest in Buddhism was sparked by psychedelics, 24 % said that they were currently using psychedelics, and 71 % believed that psychedelics can provide a glimpse of what Buddhist practice point to. (Osto 2016, 1.)

Second evidence comes from James Colemans study of two American Zen groups, two Tibetan Vajrayana Buddhist groups, two Vipassana groups, and one non-affiliated Buddhist group from year 1999. In this study Coleman concluded that over 62 % of those seven North American Buddhist community members had used psychedelics, half said that psychedelics played a role in their interest on Buddhism, and 80 % of Western Vajrayana or Tibetan Buddhist practitioners said they have used psychedelics. (Osto 2016, 2-3; see: Coleman, 1999.)

Third evidence comes from Charles Tarts survey on the members of the Buddhist community called Rigpa Fellowship year 1991. This study had 64 responders and 77 % of them said that they had experiences with psychedelics, most only had done them few times, but 10 % had over 50 or more trips under their belt. (Osto 2016, 2; see: Tart 1991.) Fourth evidence is D. E. Ostos online survey study from 2010-2011 that had 196 responders. Here 85,1 % of responders considered themselves as Buddhist, 61,6 % had tried LSD at least once, 33,3 % continued psychedelic use, and 61,4 % of those said that their use was for spiritual purpose. 49,3 % also said that Buddhism and psychoactive substance use are compatible. (Osto 2016, 3.)

However, important thing to keep in mind when interpreting abovementioned study results is that as Osto (2016, 3) points out, all surveys and polls are not from random sample, and their sample sizes are small. This means that these studies can`t tell how widespread the use of psychedelics is among Western Buddhists. But what these studies do show is that there are some Western Buddhists who have tried psychedelics, continue to use psychedelics simultaneously with their Buddhist practice, and think that psychedelics and Buddhism are compatible. This is enough evidence to answer my second question positively. There is a connection between psychedelic use and modern Western Buddhism.

To end this chapter, let`s go back to the short historical story of Western Buddhism and psychedelics. Fields (2015) argues that although 1960-70s were the time when psychedelic use and Buddhism merged, psychedelics seemed to vanish from the Western Buddhist scene almost entirely in the 1970-80s. Fields thinks there were two major reasons for this. Firstly, many Buddhist communities didn`t want to break the law because of the strict drug policies in many Western countries. Secondly, many Buddhist communities wanted to separate themselves from the hippie culture where psychedelic use was mainly associated. However, the use of psychedelics inside Western Buddhism never totally stopped, it went underground (Fields 2015; Osto 2016, 56).

Today as the attitudes towards psychedelics, and maybe even all drugs in general, are slowly becoming more liberal, there is a public and active psychedelic Buddhist community called psychedelic sangha located physically in the United States (online: www.psychedelicsangha.org). This community argues that its mission is to promote a synergetic relationship between meditation and psychedelics. The idea behind this is that combining both, psychedelics and meditation, spiritual experiences may become more powerful than using only one of these methods alone. Psychedelic sangha traces its origins to ancient Indian ritualistic use of plants, but also to those 20th-century artists and practitioners who started to combine and experiment with meditation and psychedelics in the 1960s and 1970s. So, today there really exists something that can be called psychedelic Buddhism.

5.2 PSYCHEDELIC EXPERIENCE AND BUDDHIST MIND TRAINING

The second issue of this section concerns the relations between psychedelic use and Buddhist mind training. In his book *Altered States: Buddhism and Psychedelic Spirituality in America* (2016) D. E. Osto gives examples of contemporary Japanese, Tibetan, and American Buddhist teachers and scholars who hold mixed attitudes towards psychedelics. They either deny that psychedelics have anything to do with real Buddhist mind training, accept that psychedelics may be useful in the beginning of the mind training path, or advocate psychedelic use as a one legitimate possibility alongside mind training. In general, Osto (2016, 18) argues that there seems to be tension between a more traditional and conservative rejection of psychedelics, and more modern permissive attitude towards psychedelics and their possible value to mind training.

First thing to tackle here is that as was already stated in the introduction, there are obvious phenomenological similarities with psychedelic experiences and spiritual or mystical experiences. But the question that has seen debate is are these experiences same or different? To push this idea further, is religious or spiritual mysticism more genuine or real than psychedelic catalysed "chemical mysticism"? For example, Walsh (2015) argues that there are still many who insist that few micrograms of some substance simply can`t give same kind of experiences that some serious meditators or yogis achieve after decades of practice. However, in his article *Do Drugs Have Religious Import?* (1964) scholar of religious studies Huston Smith (1919-2016) gives philosophical arguments against the view that "chemical mysticism" can`t be as genuine or real as religious or spiritual mysticism. (Walsh 2015.)

Following Walsh`s (2015) interpretation of Smiths article, there are five points to consider. Firstly, it is clear that some psychedelic experiences are not mystical or spiritual. However, this does not prove that psychedelic experience can`t be spiritual or mystical. It seems like some psychedelic experiences, if seen from the experiential point of view, are indistinguishable from spiritual or mystical experiences had by other means. (Smith 1964, 520-524; Walsh 2015.) Secondly, there is a difference in the way how spiritual or mystical experiences can be had. In other words, causation of psychedelic experience is different from the spiritual or religious experience. However, from this does not follow that experiences are, or must be, experientially different in any way. Again, seen from the experiential point of view, different causation simply doesn`t matter. (Smith 1964, 525-528; Walsh 2015.)

Thirdly, some argue that mystical or spiritual experiences must come from God as a gift. Therefore, these experiences can`t be human controlled. Interestingly, Smith argues that this claim runs into problems especially with the case of Buddhism, because as I already presented before, Buddhism doesn`t have a belief in God or supernatural divine being. So, if all mystical or spiritual experiences must be out of human control and come from God, then it seems that Buddhists simply can`t have genuine spiritual or mystical experiences. (Smith 1964, 523-529; Walsh 2015.) This is of course pretty extreme view, because Buddhism is usually classified as a religion. I do believe that very few would want to deny a whole religion from having any genuine spiritual or mystical experiences.

Fourthly, some may argue that psychedelic experiences are too quick and easy to have. Therefore, they are not genuine. However, this claim seems to be another version of confusing different causation with identical experiential contents. Fifthly, aftereffects of psychedelic experiences are different, less long-lasting, and beneficial than those of genuine mystical and spiritual experiences. Again, the fact that aftereffects may be different doesn`t mean that experience or its content are different. (Huston 1964, 518-529; Walsh 2015.) I think all first four arguments Walsh and Smith makes are valid. Therefore, I find the whole point of arguing about the difference of "chemical" or "spiritual" experiences simply not productive at all. However, the last point about the aftereffects is interesting, and next I analyse it little bit further.

If we look at the fifth case through Buddhist framework, it becomes clear that understanding the difference between momentary experience and lasting insight seems to be missing. As is the case with Buddhism, only entering deep states of momentarily concentration (p. *jhana*, skt. *dhyana*) is not enough to liberate from suffering. What is needed is the insight. To illustrate this divide let`s remember the three cases on ego dissolution experience under psychedelics I presented before. In all cases, the one who went through ego dissolution says that the change from the "self-mode" to another vantage point ("non-self-mode") was not lasting. It weathered out, although all of them said that this experience gave them positive aftereffects or memories. Therefore, I argue that aftereffects from psychedelic experience and spiritual or mystical experience may be same, but aftereffects of insight and psychedelic or spiritual or mystical experience are not. If one wants to understand how psychedelic mysticism and Buddhist mind training differ from each other, this is the main point to focus.

Then, thinking further about the relationship between psychedelics and Buddhism, Osto (2016, 79, 139) presents an interesting possibility. He divides psychedelics as: 1) a gateway to Buddhist practice, and 2) an adjunct to Buddhist practice. Osto (2106, 79-80, 84-86) argues that in a first gateway sense, psychedelics as a "door opener to Buddhism" metaphor appears in many personal accounts of those Buddhist practitioners and teachers who have experiences with psychedelics and Buddhism. This means that the use of psychedelics has functioned as an initiatory experience to Buddhist philosophy and/or mind training. But after this, psychedelic use is seen to have limited value, being irrelevant, or even becoming impediment. The main idea here is that psychedelics are seen as a form of gateway to a more serious engagement with Buddhism.

If we look at the gateway idea through Vajrayana Buddhist Mahamudra mind training path I presented earlier, an interesting question arises. Could it be possible to have a recognition of the nature of the mind with the help of psychedelics? Crowley (2019, 259-260) argues that psychedelic use doesn`t automatically produce the recognition of the nature of the mind. He thinks that psychedelics are more likely an uncertain means to recognition. But he argues that what makes the probabilities of recognition go up is to have teacher or a guide who knows psychedelics and Buddhist philosophy and mind training both theoretically and experientially. I agree with Crowley. My view in this issue is based on my own psychedelic experiences and spiritual or mystical experiences and insights I`ve had during my mind training path. There definitely seems to be possibilities. I also agree with Crowley that in order to use these possibilities, there probably should be experiential knowledge of both psychedelics and mind training path present.

Analysing abovementioned issue further, I divided the pointing out (the nature of the mind) instructions into three phases. First one was to recognise the clarity of the experience, second one was to have an insight into non-self, and third one was to have experiential clarity, selflessness, and effortless knowing of nature of the mind present all the time. If we again look at the three examples of psychedelic trips I presented earlier, then it seems like all of them have a recognition of non-self, and maybe also recognition of clarity, but none of them had lasting insight into non-self. In the case of Steve E. maybe even a total glimpse of liberation. Therefore, it is important to understand what phase of pointing out instructions psychedelic experience could have and in what phase of the recognition of nature of the mind one aims at.

On the other hand, Osto introduced the idea that psychedelics can be used as an adjunct to Buddhist practice. Osto (2016, 139) argues that through his studies and interviews with Buddhist practitioner and teachers, there are some who believe that psychoactive substances have value within their regular Buddhist practice, not only in a gateway sense. One examples of this comes from a 35-year-old male Buddhist practitioner who has done many longer meditation retreats and who also does psychedelics two or three times a year. He argues that psychedelics can help to gain insight into emptiness, help to see the role of the mind in creating reality (mind-dependent view of reality), and catalyse profound feelings of compassion. Seen this way psychedelics can be seen as tools that can be used to progress on a mind training path. (Osto 2106, 147.)

From a more tantric point of view Osto (2016, 148) gives interesting example of a Tibetan Buddhist 41-year-old male who´s use of peyote in the Native American Church. The Church is an indigenous religious movement among North American Indians that combine Christian and Indian religious elements. Native American Church can use peyote legally in some ritual contexts. The point is, that this man´s peyote use is considered by his Buddhist teacher and by current Dalai Lama as terma (tib. *gter ma*)[27]. Termas are usually considered a very valuable means of Vajrayana Buddhist teaching and practice.

The main points of this section are that there are Buddhists who use psychedelics, and there are Buddhists who think that Buddhism and psychedelics are compatible. Some Buddhists use or have used psychedelics only as a door opener, but some use psychedelics also as an adjunct to their mind training practice. I believe it is possible to use psychedelics as means to pointing out the nature of the mind. However, it is not clear that psychedelics could function as means to gain lasting insight into non-self, although I don`t see an overwhelming reason why this also couldn`t happen when the right circumstances are there. But these circumstances should probably include someone who can guide the experience towards recognizing the selfless clarity or the nature of the mind.

5.3 MINDFULNESS VERSUS MIND TRAINING IN VAJRAYANA BUDDHISM

In this chapter I present my criticism towards how Letheby understands mindfulness. Besides this, I also make more widespread criticism towards contemporary mindfulness studies. Firstly, I argue that mindfulness studies are problematic from the metaphysical point of view. Secondly, I argue that there is still lack of scientific proof for the efficacy of mindfulness, although there are lots of studies done. Thirdly, and most importantly, I argue that seen from the viewpoint of Vajrayana Buddhist mind training mindfulness has some problems, and this may be the reason why mindfulness may not be so effective as is sometimes believed.

[27] Terma literally means a hidden treasure. Terma can be a hidden and found physical text, revelation in one`s own mind stream that is seen to come from earlier lives, or revelation through vision from a very pure mind. In Tibet termas started to appear sometimes after 1000ce. In all cases termas can be seen as either authentic words of the Buddha or forgeries and fabrications. (Buswell & Lopez 2014, 329.)

First critique consists of metaphysical believes that are ingrained in mindfulness studies. Thompson (2016, 121-122) argues that there are two misguided ideas in contemporary mindfulness studies. First one is that mindfulness is seen as an inward awareness of your own mind. Second one is that to understand the effects of mindfulness, one must look inside the head at the brain. Thompson argues that when these two ideas are combined, they become too often repeated idea that training your mind changes your brain. However, seen from the philosophical point of view, the idea of "mindful brain" implies dualism. It is not just brains that are mindful, human beings are mindful. In order to practice mindfulness or any other form of meditation, one needs a body. Therefore, mindfulness studies need embodied perspective. Now, if one looks at the historical evolution of Buddhist philosophy, it is clear that especially in the case of Vajrayana, the notion of embodiment became very important.

Then again according to Thompson (2020, 121-122), another common view that mindfulness studies hold is that you are the brain (this language can also be seen in many neuroscience books). Then from that, it is argued that your mind is what your brain does. This view implies physicalism. The problem here is that as was seen already above, a person is not only a brain. Person is a human being. Thompson argues that in order to understand how person is not just a brain, but also at the same time not separate from one`s brain, the enactive approach to mindfulness studies is needed. (Thompson 2020, 121-122.) From this critique it is seen that in order to better avoid metaphysical assumptions behind mindfulness studies, taking into consideration the embodied and enactive views, and I would also argue learning more widespread understanding of Buddhist philosophy, could help a lot.

Before going to the second critique, I want to note that my aim here is not to argue that mindfulness doesn`t work at all or that it is completely wrong. For example, in mindfulness studies there is an understanding that meditation is not about trying to clear mind from all thoughts (Segal et. al. 2013, 149), and although I earlier argued about the centrality of the brain in mindfulness studies, there is also understanding about the important role of body as an object of attention (Segal et. al. 2013, 120). However, at the same time there are views that mindfulness does not actually provide solutions to anyone`s problems like depression (Segal et. al. 2013, 145). Instead, mindfulness is seen just as way to prevent further depression (Segal et. al. 2013, 102).

Despite all this, I do believe mindfulness really helps some people. Systematic reviews and meta-analysis from different aspects of mindfulness studies show that it can alleviate anxiety and depression (Goyal et. al. 2014), feeling of chronic pain (Hilton et. al. 2017), and stress (Jayawardene et. al. 2017). Some systematic reviews also suggest that mindfulness can lower blood pressure (Solano Lopez 2018) and have positive effects on immune system (Black & Slavich 2016). However, as Thompson (2020, 121) argues, evidence that mindfulness can induce long lasting beneficial changes is still tentative.

Analysing this issue further, David Vago presents in his article ”How meditation Changes the Brain: A Neurophilosophical and Pragmatic Account” that systemic reviews and meta-analyses of randomized controlled trials of mindfulness-based interventions have shown in general inconsistent results. Vago also argues that in these studies the relation between meditation practices and self-repot measures of mindfulness are inconsistent. (Vago 2022, 176.) In his article, Vago goes through the history and different techniques of meditation studies and states that the analyses of the data from the studies do actually undermine the ongoing mindfulness hype. However, he notes that some of the findings in the studies are promising. This warrants both future empirical studies and philosophical analyses of meditation. (Vago 2022, 186.) I hope that my next critique of mindfulness could be seen as a small part of philosophical analyses of meditation, and therefore be beneficial to mindfulness studies.

The third critique starts from the definition of mindfulness. Letheby uses mindfulness studies as a support for his view on naturalistic mechanism of psychedelic therapy. He defines the mindfulness in the following way:

> “Mindfulness meditation, also known as Vipassana or “insight” meditation, is a practice drawn from the Buddhist traditions. It consists of a body of techniques for systematically cultivating the ability to bring a steady, open, non-reactive attention to whatever contents arise on the phenomenal field – thoughts, feelings, sensations, and so on – without becoming “caught up” or unduly invested in any of them. The practice typically begins with the stabilisation of attention and the development of concentration by focused attention to bodily sensations, including the breath.

> On the basis of meditative concentration, the practitioner then engages in "open monitoring" – giving a bare, even attention to all mental contents without attempting to restrict or direct them in any way. Ideally, the successful practitioner will ultimately be able to retain her equanimity and tranquilly observe or witness the passing flux of experience, without identifying with or getting "caught up in" any of its transient contents." (Letheby 2021, 89-90.)

Letheby argues that in Buddhism the purpose of mindfulness is to foster an experiential insight into non-self:

> "The purpose of mindfulness in the traditional Buddhist path is to foster direct experiential insight into the putatively liberating truths of impermanence (*anicca*) and non-self (*anatta*) – the transience and insubstantiality of all phenomena, including the meditator herself." (Letheby 2021, 90.)

But as Letheby (2021, 90) points out, today mindfulness techniques are adapted for secular purposes and the Buddhist philosophy is not in there anymore. Husgafvel (2023, 72) also argues that contemporary Mindfulness-Based Stress Reduction (MBSR) program doesn`t have philosophical basis that resembles Buddhist thought. Nowadays the usual definition of mindfulness is:

> "…self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment. (…) adopting a particular orientation toward one´s experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance." (Bishop et. al. 2004, 232.)

In this definition, mindfulness has two components: being aware of one`s thoughts and feelings, and then orienting oneself in a peculiar way towards these thoughts and feelings. Comparing this definition to Letheby`s definition, we can see that the Buddhist language is absent. However, the real relationship with modern secular mindfulness and Buddhism is quite complicated.

Originally clinical mindfulness practice began 1979 in the United States by professor of medicine John Kabat-Zinn´s programme. This program was designed for chronic pain and stress patients. Later Kabat-Zinn renamed the program as Mindfulness-Based Stress Reduction with actual intention to highlight it`s foundation on Buddhist teachings. (Husgafvel 2023, 9-10.) Husgafvel (2023, 56, 72-74) also points out that John Kabat-Zinn has studied many different kind of Buddhist mind training techniques and he`s understanding of Buddhism derives from the so called modern transnational Asian Buddhist lineages and American convert Buddhist communities. Therefore, MBSR contains the idea that it addresses suffering in a Buddhist sense: being rooted in emotional grasping and clinging. Also, Kabat-Zinn emphasises in his works the illusory nature of the self. He argues that self is an emergent phenomenon grounded in cellular and neurobiological processes. So, this is the actual context where the mindfulness practices are recontextualized into secular MBSR program. What is going on in here and what is the problem?

Husgafvel (2023, 79) notes there are opinions in contemporary mindfulness studies that when mindfulness is taken out of the Buddhist philosophical context, its transformative potential is diminished. This is something I also claim. It is clear that the early Pali canon text called *Satipaṭṭhana Sutta* is one primary source of contemporary mindfulness. However, the contemporary emphasis on mindfulness as awareness of thoughts and feelings in the present moment, and non-judgemental attitude towards these is rather different than the understanding of mindfulness in the early Buddhist text. (Gowans 2022, 168.) Despite this, Husgafvel (2023, 79) argues that Kabat-Zinn recontextualized the “essence” of Buddhist teachings into secular mainstream. I admit that at some level Kabat -Zinn may have recontextualized some aspects of Buddhist mind training successfully to modern people. But I also claim that although the roots of mindfulness are in Buddhist thought, it can`t be said to follow Buddhist philosophy. Therefore, it is not so that Kabat-Zinn recontextualized the “essence”, but more like he missed the “essence”.

What I mean by my abovementioned claim can be further elaborated in a following way. As Thompson (2020, 120) clarifies, Buddhism has no single traditional understanding of mindfulness. Usually, mindfulness is translated to Pali word *sati*, or to Sanskrit word *smirti*. Literally both these terms mean memory. In the context of meditation, this simply refers to the ability to hold chosen object in mind without distraction or forgetfulness. Comparing this idea to the mind training map of Mahamudra I presented earlier, this is the first phase called one-pointedness. The way Letheby

describes mindfulness, at first glance it looks like the first step as a distinct practice phase is missing. However, there is a ”stabilisation of attention and the development of concentration by focused attention to bodily sensations”. Then, from the basis of this concentration, an “open monitoring” or “bare witnessing” is started. Also, in the book *Mindfulness-Based Cognitive Therapy for Depression* (2013) the importance of the one-pointed attention is highlighted. It says that: “*Concentration*. The ability to deploy and maintain attention on a particular focus is central to all other aspects of MBCT.” (Segal et. al 2003, 91). So, mindfulness does emphasize one-pointed concentration.

However, Thompson (2020, 120) describes that contemporary mindfulness also emphasize non-distraction without discrimination in a “non-dual style”. Also, Husgafvel (2023, 3) argues that MBSR appears as more non-dual approach to meditation. Although there are elements of MBSR that come from Theravada like *Satipaṭṭhana Sutta*, like was pointed out before, the guiding principles come from Mahayana and Vajrayana non-dual traditions of Zen and Dzogchen (Husgafvel 2023, 73). I think that the “open monitoring” technique of mindfulness can be compared to Mahamudra mind training maps third phase called one-taste. But by doing this, the problem becomes self-evident. In mindfulness the second phase of calming the mind called simplicity and also the first and second phase of pointing out instructions is missing. In the Mahamudra map the first calm abiding phase can be seen to end into the insight of non-self, and this starts the second phase.

Keeping the abovementioned point in mind, I argue that mindfulness has a serious problem exactly because it distances itself from Buddhist philosophy. Mindfulness does not have practical pointing out instructions. In usual MBSR program practitioner may select from variety of practices what she likes, and there is no aim given for any practice (Husgafvel 2023, 82). MBSR eight-week basic program includes sitting meditation in the form of body-scan practice, mindfulness of breathing, sound, thoughts, and feelings, walking meditation, and compassion practice (p. *metta-bhavana*) (Husgafvel 2023, 9-10). From this can be seen that MBSR do have some practices that Buddhists usually also do, but the sequence and aim of these practices is not there. Therefore, it is not hard at all to imagine someone doing mindfulness for a very long time, being aware of her experiences but never having insight into non-self. Like Letheby described mindfulness-related capacities as “a gap between experienced self and other mental states”, this gap in itself doesn`t lead into anything more than perhaps some amount of calmness.

Why I further argue that missing of phases in mind training is problematic, is that mindfulness conception of “open monitoring” or “bare witnessing” as ways to produce positive effects on well-being does not really work effectively if there is no insight into non-self. This is because the root cause of suffering, as Buddhist philosophy highlights, is the grasping, craving, and attachment into permanence. As a young man I felt unhappy and depressed, and eventually this became my identity. I identified myself as the one who is depressed. In order to break this attachment, the process has to start from the insight into impermanent nature of the self. As I have already elaborated before, this attachment to permanency is not only cognitive, its affective or emotional in its core. Therefore, it doesn`t help to only read neuroscience books that tell self is “emergent property of neurobiological processes” and therefore “it is an illusion”. There has to be emotional and cognitive insight into the nature of the self. How this can be achieved is to follow the Buddhist philosophy and apply it to mind training. One example of this is the path of Mahamudra, where you first recognize the clarity of the mind, then have insight into non-self, and eventually deepen the clarity and non-self into emptiness of every phenomenon, including for example depression.

At the end of this section, I want to come back to mindfulness studies and make one last note. As Vago (2022, 185) points out, findings of meditation studies in large are primarily based on newcomers to meditation. Therefore, they do not as a whole represent the breadth of experience outlined in the mind training teachings. I argue that the way I presented the problems of mindfulness is one case of this problem that Vago recognized in his analyses. What meditation studies need more is to study those who have done mind training with serious attitude for a longer time, and to study those who have understood and followed at least some consistent philosophy among their mind training. Philosophy and mind training simply can`t be separated from each other. There is no effective meditation and will never be that is somehow “not philosophical”. In the next section I move to different topic and present my proposal how Vajrayana Buddhist mind training could guide psychedelic therapy better than the ideas of modern mindfulness.

5.4 VAJRAYANA BUDDHISM AS A GUIDE FOR PSYCHEDELIC THERAPY

Although in last chapter I argued that mindfulness studies have some problems, it is true that there are similarities between psychedelic therapy and mindfulness. According to some studies, they both seem to induce similar kind of psychological, phenomenological, and neurobiological changes

(Payne et. al. 2021, 416). Payne et. al. (2021, 418-419) also argues that there are positive synergies between psychedelic therapy and mindfulness. The interesting ones they suggest are that psychedelic induced peak experience may motivate people to sustain mindfulness practice and increase the depth of mindfulness practice. Mindfulness could also help psychedelic therapy patients during challenging experiences or "bad trips", and to sustain the positive afterglow effect that usually lasts only some days or weeks much longer. Another article by Chambers et. al. (2023, 2119-2120) argues that mindfulness-based interventions could maximise the likelihood of being able to surrender to ego dissolution experience or other kinds of emotional breakthroughs.

However, my argument is that Buddhist philosophy and Vajrayana Buddhist mind training can offer more effective tools for psychedelic therapy than mindfulness. Nowadays the usual formula of psychedelic therapy is following: 1) preparation, 2) dosage session (or sessions) with psychedelic, and 3) integration (Simonds 2023, 58). Simonds (2023, 61) argues that psychedelics could be used in more directed way by paying attention to the philosophical views people bring to psychedelic experience. In Buddhism, as I have argued in this thesis, mind training practitioners do not simply sit in meditation and wait something to happen. There is always philosophy involved, and practice always has an intention and aim to it. Simonds (2023, 64) argues that the idea of intention and aim could be used in psychedelic therapy also. This means that the patient is guided to identify the desired outcome of the therapy.

As Simonds (2023, 64) correctly notes, the root cause of maladaptive behaviours like depression and anxiety in Buddhism is the belief and emotional grasping of unchanging, essential self. The antidote to this is the philosophical view of non-self, which is then actualized through mind training. One possible way to use psychedelic therapy would be to intellectually prepare the patient with the Buddhist philosophy, namely the view of non-self and emptiness, and then let the patient in the dosage session turn this philosophical view into affective and embodied insight. I believe this could be an effective way to do psychedelic therapy. I also argue that this is somewhat seen already in the pioneering early work of Stanislav Grof that was mentioned earlier in this thesis. Through thousands of psychedelic therapies sessions, he identified the importance of ego dissolution experience. This experience is many times a glimpse to the nature of the mind. With the help of Buddhist philosophy and mind training, this glimpse could be turned into insight and lasting alleviation from suffering.

Simonds (2023, 65) also gives some practical tips how the abovementioned framework from Buddhist philosophy could work during the dosage session. Like is usual nowadays in psychedelic therapy, there are two sitters beside the patient. It could be reasonable that at least one of them could help the patient remember the view of non-self and emptiness. As I argued before, if psychedelics are used as means to recognize the nature of the mind, then it would be better that psychedelic sitter should have not only philosophical but also experiential knowledge of Buddhist mind training. This is of course easier said than done, because if the sitter should also have completed or at least have a very thorough experience of the mind training path besides knowing philosophical view, then there are probably not so many suitable sitters hanging around.

One obvious problem for my abovementioned suggestion is that it involves religion. As Simonds (2023, 64) also points out, it is not realistic to think that a religious view of Buddhism would be accepted by psychedelic therapists who arguable work mostly in secular context. However, as I have argued in this thesis, from the viewpoint of non-dual phenomenology, Buddhist philosophy could be seen to be free from non-naturalistic metaphysical views. If the aim of Buddhism is alleviation of suffering and liberation from suffering, and this can happen in one lifetime, there is no need for the belief of rebirth or reincarnation and mind/body dualism it seems to entail. Although there are many different kinds of deities and Buddhas flowing around especially in Vajrayana Buddhism, these are not outside your own mind “out there”. Even the mysterious and shamanistic Padmashambhava argues that in order to gain liberation, one has to see deities and Buddhas as manifestation of one`s own mind, because that is what they ultimately are. However, on the other hand, endorsing physicalism or accepting only those methodologies that come from naturalistic framework may also be non-productive. As I have argued in this thesis, better and more encompassing view of the nature of reality is needed if we want to do more efficient psychedelic research and mindfulness studies.

6. CONCLUSIONS

In the introduction I presented the two-part research question of this thesis in the following way: What are the commonalities and differences between naturalistic mechanism of psychedelic therapy and Buddhist philosophy and Vajrayana Buddhist mind training? And how can Buddhist philosophy and Vajrayana Buddhist mind training help to guide psychedelic therapy? I begin my conclusions from the commonalities and differences and then move to the second question.

Common to both approaches, Letheby`s naturalistic mechanism of psychedelic therapy and Buddhist philosophy and mind training, is the central role of the sense of self. Letheby argues that psychedelics have influence on two brain neural networks called Default Mode Network (DMN) and Salience Network (SN). This influence starts a process of predictive self-unbinding where the patient`s sense of self is disturbed momentarily. This disruption, especially in the autobiographical self, gives patient window to see herself in a different way. Letheby argues that the main effect this have is that through therapy patients learn new knowledge-how or skills that he calls psychological insights and mindfulness-related capacities that enhances patient`s well-being.

In Buddhist philosophy and mind training the most important point is to achieve insight into the nature of the mind. This happens through learning Buddhist philosophy and then applying it to practical mind training. If Letheby`s naturalistic mechanism has its basis on physical interaction between psychedelics and brain networks, the basis of Buddhism is in the systematic subjective exploration of one`s states of mind. However, Buddhism is not a scientific endeavour, and it is wrong to argue that Buddhist mind training makes scientific discoveries about the mind. The real aim of Buddhist mind training is to change the subjective experience so that it alleviates suffering or liberates from suffering, and not to acquire some kind of scientific or metaphysical true knowledge about how things really are. Therefore, I argue that in a very general sense naturalistic mechanism of psychedelic therapy and Buddhist philosophy and mind training have the same common goal of alleviating or liberating from suffering, although they approach this goal from different viewpoints.

Another interesting commonality comes up when the idea of prior knowledge (priors) in predictive processing framework are compared to Yogachara Buddhist notion of substrate consciousness. In predictive processing priors are seen to form a hierarchical system and the main task of brain is to minimise the prediction error between the brain created representational model of the world and sense data. In Buddhist philosophy substrate consciousness is seen to be a place where the karmic seeds reside, or in another words, the seeds for upcoming intentional actions, and this is seen to dictate how we experience the world. Although these ideas remind each other, I think they are not pointing to the exact same thing because of the larger philosophical framework around them. Predictive processing is intended to explain how our cognition works in general, but in Buddhism, the idea is that substrate consciousness is the source of suffering, and what is needed is to "see" through it or in another words, purify it from the seeds.

After going through some similarities, next I present some differences. One clear difference between Letheby`s naturalistic theory of the mechanism of psychedelic therapy and Buddhist philosophy comes from the views about the nature of reality. Letheby argues that methodological naturalism and physicalism are true. This view is philosophical in its nature, and it does not come from any scientific theory. However, I argue that Letheby backs his view mainly by the notion that because science has been so successful in explaining the material world, it means that we can trust science to tell us how everything really is. This means that there can be no such things as Gods, angels, Cartesian souls, or any non-natural properties, because science tells us so.

On the other hand, Buddhism can be seen to advocate epistemologically idealistic and metaphysically dualist view of reality. However, as is the case with "materialistic worldview" that Letheby endorses, there are no Gods, angels, or eternal souls in Buddhism. But if there is a rebirth or reincarnation in a sense that consciousness is seen to be fundamentally different from the material body, I assume this kind of consciousness Letheby would classify as Cartesian substance, or at least some kind of non-natural property. It is clear that there is a belief in rebirth or reincarnation in Buddhism through all the major vehicles of dharma. Therefore, Buddhism in general can be seen to advocate metaphysical dualism.

Although Letheby gives experiences an undeniable role in his theory, he also argues that everything can be explained through computational theory of mind and predictive processing framework. I think this is the weakest point of Letheby`s theory. When the philosophical basis of representationalist view of perception and action and predictive processing framework are analysed, it seems that they are in conflict with the basic ideas of naturalism. Therefore, if Letheby wants to tie together methodological and metaphysical naturalism with representationalist view and predictive processing framework, it leads to a strange situation. If science is supposed to tells us how the world really is and predictive processing framework is a generally accepted scientific theory, then it follows that the philosophical viewpoint of physicalism seems to be false. Which of course would not make a lot of sense. Therefore, I argue in favour for another philosophical viewpoint towards understanding reality like enactivism or Buddhist Madhyamika.

On the other hand, Buddhist view of reality also has problems. Proving the existence of rebirth or reincarnation by anecdotal evidence from memories or arguing that rebirth or reincarnation is logically possible are not plausible enough. Therefore, I presented and alternative option to see Buddhism as a non-dual phenomenology. This view comes from the notion that the core idea of Buddhism is that it is a practical path to achieve liberation from suffering. In the Vajrayana Buddhism, the goal of liberation from suffering is seen to be possible to achieve in one lifetime and its philosophy and especially its practices are designed with this in mind. This means that there is no need for a belief in rebirth or reincarnation if one wants to be liberated from suffering. Alternative support for non-dual phenomenology comes from some well-known Buddhist Madhyamika philosophers and practitioners who have argued against the possibility to reach any absolute knowledge about the nature of reality by intellect only. Therefore, seen from that viewpoint, maybe all philosophy of mind is one form of suffering.

The second research question asked how can Buddhist philosophy and Vajrayana Buddhist mind training help to guide psychedelic therapy? As I presented in the section on psychedelic Buddhism, in historical context it is highly probable that some practitioners of Vajrayana Buddhism used psychedelic substances as an aid to their mind training practice. How widespread or significant this use has been, is unknown. There is also some speculation that psychedelic substances are the origins of all mystical and spiritual experiences. However, it is well-known that mystical and spiritual experiences can be caused by many other ways, therefore only one origin may be insufficient to

explain everything. Instead of the somewhat vague knowledge of historical Buddhist use of psychedelic substances, in today`s Western world psychedelics are used in Buddhist context. Therefore, there is a real historical and existing connection between Buddhism and psychedelics.

What this means is that some Buddhists practitioners have a good viewpoint on the phenomenology of both, psychedelic experience and mind training. For example, Mike Crowley`s and my own opinion are much of the same. There are clearly similarities with psychedelic experiences and experiences that comes through meditation, and I think there are no good reasons to say that some of them is more genuine than other. However, what is the difference between psychedelic or spiritual or mystical experiences and insight is another matter. In Buddhist view, momentarily experiences can not bring lasting alleviation or liberation from suffering, despite how dramatic or deep these experiences are. Insight is always needed.

My argument is that psychedelic studies could learn useful things from Buddhist philosophy and Vajrayana Buddhist mind training. One of the most important of them is the abovementioned distinction between momentarily experience and lasting insight. I think Buddhist framework could be useful for psychedelic therapy, maybe even more so than modern secular mindfulness. Because psychedelics can catalyse very deep experiences of ego dissolution, Buddhist philosophy can be a better guide for how to understand the scope of those experiences. I think best scenario for psychedelic therapy would be when sitter in the therapy session would have both philosophical and experiential know-how of Buddhism and especially Vajrayana Buddhist mind training.

One limitation or weakness of this study is that there is only superficial philosophical presentation and analyses of Vajrayana Buddhism and predictive processing framework. Both of these have much more detailed philosophical discussion available that I couldn`t present in this thesis. Another limitation or weakness is the narrow presentation of the ethical dimension of Buddhism. I think this dimension is very important, but I had to mostly exclude it out because it would have taken a lot of space. Although I argued that Vajrayana Buddhism can be seen as most evolved form of Buddhist philosophy and practice, I`m well aware that there have been many Vajrayana Buddhist teachers and “masters” who have done questionable things, like instigate violence and abuse their students. This behaviour is inexcusable. Simply being or identifying as Vajrayana Buddhist teacher, master, or reincarnated tulku doesn`t in itself guarantee anything.

I believe this thesis opens up at least two possible areas for future research. One is a study of the relationship between spiritual or mystical and psychedelic experience and Buddhist insight or pointing to the nature of the mind. This kind of study could be interesting because I believe insight in Buddhist sense could be seen as a different or special kind of insight when compared to insight in general. Another possible area of study could be to do more in-depth and detailed study of how Buddhist philosophy and Vajrayana Buddhist mind training could be seen from a therapeutic view-point, and how this could help (psychedelic) therapists in their clinical work. As I already argued in this thesis, especially taking into account today`s increasing scientific knowledge, I believe Buddhism is best seen as a "psychology" and through a therapeutic lens, and not through metaphysics or as any kind of ethical or societal theory.

May all sentient beings be happy and free from suffering!

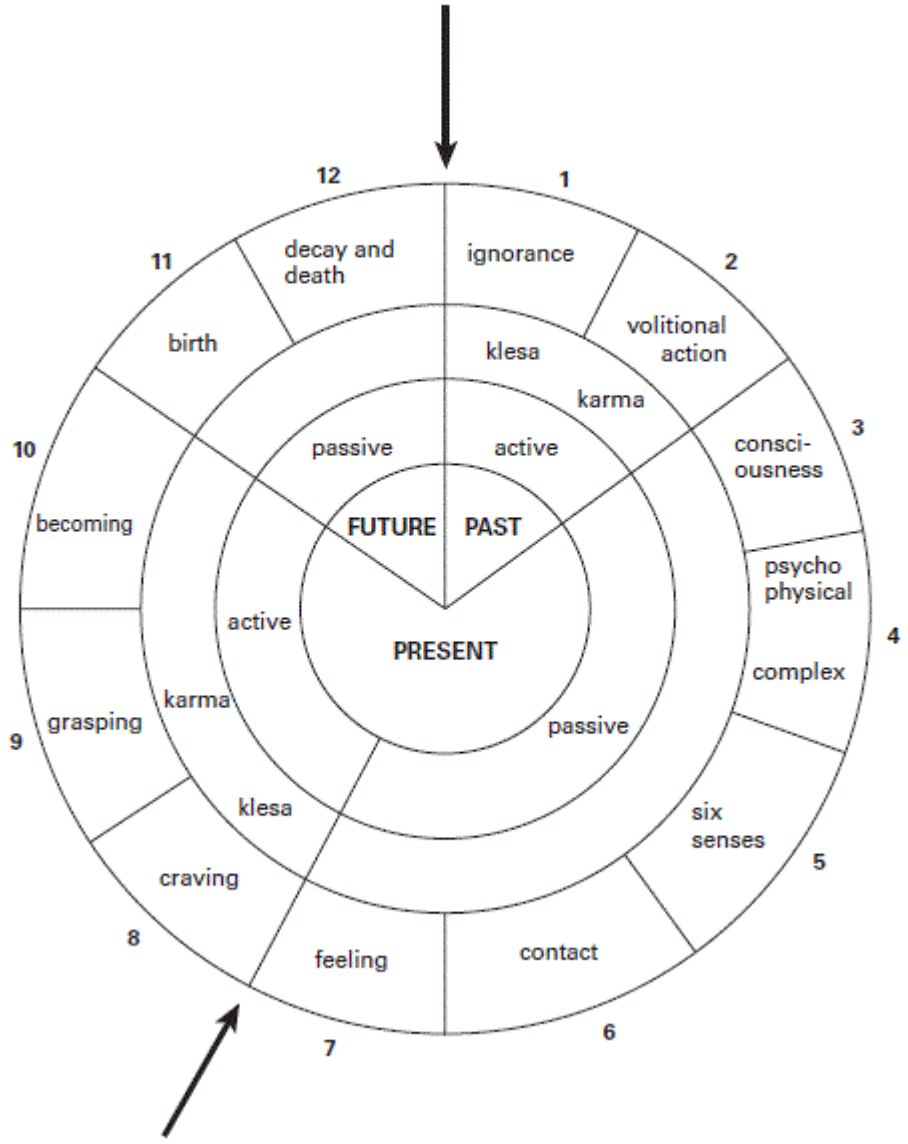
APPENDIX A

Colorful version of “wheel of life” -picture. In the outermost side of the wheel are the pictured versions of twelve links (p. and skt. *nidana*).

Source: https://pixabay.com/fi/photos/china-temple-wheel-of-life-222325/

APPENDIX B

Diagram of the Buddhist “wheel of life” with the names of the twelve links (p. and skt. *nidana*). Arrows are pointing towards the locations where liberation from suffering is traditionally seen to be possible to achieve.



Source: Varela et. al. 2016, 112.

BIBLIOGRAPHY

APA, American Psychological Association. (2024), “False Memory.” https://dictionary.apa.org/false-memory

Baggini, Julian. (2018), *How the World Thinks: A Global History of Philosophy.* London: Granta Books.

Batchelor, Stephen. (2015), “Foreword”, in *Zig Zag Zen. Buddhism and Psychedelics,* Allan Badiner (ed.). Synergetic Press. https://synergeticpress.com/catalog/zig-zag-zen-buddhism-psychedelics/

Bishop, R. Scott, Mark Lau, Shauna Shapiro, Linda Carlson, Nicole Anderson, James Carmody, Zindel Segal, Susan Abbey, Michael Speca, Drew Velting & Gerald Devins. (2004), “Mindfulness: A Proposed Operational Definition.” *Clinical Psychology: Science and Practice, Vol. 11, No. 3*, 230-241. doi.org/10.1093/clipsy/bph077

Black, S. David & Slavich, M. George. (2016), “Mindfulness Meditation and the Immune System: A Systematic Review of Randomized Controlled Trials.” *Annals of the New York Academy of Sciences, Vol. 1373, No. 1*, 13-24. doi.org/10.1111/nyas.12998

Blumenthal, James. (2013), “Indian Mahayana Buddhism”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 86-98.

Breeksema, Joost & van Elk, Michiel. (2021), ”Working with Weirdness: A Response to “Moving Past Mysticism in Psychedelic Science.”” *ACS Pharmacology & Translational Science*, *Vol 4*, 1471-1474. doi.org/10.1021/acsptsci.1c00149

Buswell, E. Robert Jr. & Lopez, S. Donald Jr. (2014), *The Princeton Dictionary of Buddhism.* New Jersey: Princeton University Press.

Burton, David. (2013), “Emptiness in Mahayana Buddhism: Interpretations and Comparisons”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 151-163.

Chalmers, J. David. (1995), ”Facing Up to the Problem of Consciousness.” *Journal of Consciousness Studies, Vol. 2, No. 3*, 200-219. doi.org/10.1093/acprof:oso/9780195311105.003.0001

Chambers, Richard, Devon Stoliker & Otto Simonsson. (2023), “Psychedelic-Assisted Psychotherapy and Mindfulness-Based Cognitive Therapy: Potential Synergies.” *Mindfulness, Vol. 14*, 2111-2123. doi.org/10.1007/s12671-023-02206-4

Coleman, James William. (1999), “The New Buddhism: Some Empirical Findings.” In *American Buddhism: Methods and Findings in Recent Scholarship.* Duncan Williams & Christpher Queen (ed.). Richmond: Curzon. 91-99.

Comrie, Alison, Frank Loren & Kay Kenneth. (2022), “Imagination as a Fundamental Function of the Hippocampus.” *Philosophical Transactions of the Royal Society B, Vol. 377, No. 1866*. 1-15. doi.org/10.1098/rstb.2021.0336

Coyne, A. Jerry. (2009), *Why Evolution is True*. Oxford: Oxford University Press.

Crowley, Mike. (2019), *Secret Drugs of Buddhism. Psychedelic Sacraments and the Origins of the Vajrayana.* 2. edit. Santa Fe (CA): Synergetic Press.

Dalai Lama. (2005), *The Universe in a Single Atom. The Convergence of Science and Spirituality.* New York: Morgan Road Books.

The Dhammapada, Verses and Stories. (1986). Translated by Daw Mya Tin. www.tipitaka.net/tipitaka/dhp/

Dzogchen, Ponlop. (2003), *Wild Awakening. The Heart of Mahamudra and Dzogchen.* Boston: Shambhala.

Edelglass, William & Garfield, Jay. (2011), “Indo-Tibetan Buddhist Philosophy”, in *The Oxford Handbook of World Philosophy*, William Edelglass & Jay Garfield (ed.). Oxford: Oxford University Press. 187-192.

van Elk, Michiel & Eiko, I. Fried. (2023), “History Repeating: Guidelines to Address Common Problems in Psychedelic Therapy.” *Therapeutic Advances in Psychopharmacology*, *Vol. 14,* 1-20. doi.org/10.1177/20451253231198466

van Es, Thomas. (2024), “Off the Beaten Path: Perception in Enactivism and the Realism-Idealism Question.” *Phenomenology and the Cognitive Sciences,* 1-26. Published Online. doi.org/10.1007/s11097-024-10011-0

Emmanuel, M. Steven. (2013), “Introduction”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 1-10.

Frank, Adam, Marcelo Gleiser & Evan Thompson. (2024), *The Blind Spot: Why Science Can Not Ignore Human Experience*. MIT Press. https://mitpress.mit.edu/9780262553032/the-blind-spot/

Fields, Rick. (2015), “A High History of Buddhism in America”, in *Zig Zag Zen. Buddhism and Psychedelics,* Allan Badiner (ed.). Synergetic Press. https://synergeticpress.com/catalog/zig-zag-zen-buddhism-psychedelics/

Garcia-Romeu, Albert & Richards, William. (2018), “Current Perspectives on Psychedelic Therapy: Use of Serotonergic Hallucinogens in Clinical Interventions.” *International Review of Psychiatry, Vol. 30, No. 4,* 291-316. doi.org/10.1080/09540261.2018.1486289

Gendler, Tamar Szabó. (2008), ”Alief and Belief.” *The Journal of Philosophy, Vol. 105, No. 10,* 634-663. doi.org/10.5840/jphil20081051025

Gowans, Christopher. (2022), “Meditation as Cultivating Knowledge-How”, in *Routledge Handbook on the Philosophy of Meditation,* Rick Repetti (ed.)*.* London: Routledge.

Goyal, Madhav, Sonal Singh, Erica Sibinga, Neda Gould, Anastasia Rowland-Seymour, Ritu Sharma, Zackary Berger, Dana Sleicher, David Maron, Hasan Shihab, Padmini Ranasinghe, Shauna Linn, Shonali Saha, Eric Bass & Jennifer Haythornthwaite. (2014), “Meditation Programs for Psychological Stress and Well-Being: A Systematic Review and Meta-Analysis.” *JAMA Internal Medicine, Vol. 174, No. 3*, 357-368. doi.org/10.1001/jamainternmed.2013.13018

Grof, Stanislav. (1980), *LSD Psychotherapy.* Pomona (CA): Hunter House.

Guyer, Paul & Horstmann, Rolf-Peter. (2022), "Idealism", *The Stanford Encyclopedia of Philosophy,* Edward N. Zalta (ed.). plato.stanford.edu/archives/spr2022/entries/idealism/

Hajicek-Dobberstein, Scott. (1995), “Soma Siddhas and Alchemical Enlightenment: Psychedelic Mushrooms in Buddhist Tradition.” *Journal of Ethnopharmacology, Vol. 48, No. 2,* 99-118. doi.org/10.1016/0378-8741(95)01292-L

Hartogshon, Ido. (2017), “Constructing Drug Effects: A History of Set and Setting.” *Drug Science, Policy, and Law, Vol. 3,* 1-17. doi.org/10.1177/2050324516683325

Harvey, Peter. (2001), *Buddhism.* London: Bloomsbury Publishing.

Harvey, Peter. (2013), “Dukkha, Non-Self, and the Teaching on the Four “Noble Truths””, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 26-45.

Hayes, Richard. (2013), “Philosophy of Mind in Buddhism”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 395-404.

Hilton, Lara, Susanne Hempel, Brett Ewing, Eric Apaydin, Lea Xenakis, Sydne Newberry, Ben Colaiaco, Alicia Ruelaz Maher, Roberta Shanman, Melony Sorbero & Margaret Maglione. (2017), “Mindfulness Meditation for Chronic Pain: Systematic Review and Meta-analysis.” *Annals of Behavioural Medicine, Vol. 51, No. 2*, 199-213. doi.org/10.1007/s12160-016-9844-2

Hofmann, Albert. (2013), *LSD My Problem Child.* Oxford: Oxford University Press.

Husgafvel, Ville. (2023), *Mindfulness-Based Stress Reduction as a Post-Buddhist Tradition of Meditation Practice*. Doctoral Dissertation, Helsinki. www.helda.helsinki.fi/items/51b9d4f3-8dc5-427a-af77-7674344fdeea

Huston, Smith. (1964), “Do Drugs Have Religious Import?” *The Journal of Philosophy*, *Vol. 61, No. 18,* 517-530. doi.org/10.2307/2023494

Jamyang Khyentse. (2022), *Cymbals of the Devas. In Praise of the Lord of Sages, Peerless Teacher to All, Including the Gods.* Translated by Adam Pearcey. www.lotsawahouse.org/tibetan-masters/jamyang-khyentse-chokyi-lodro/praise-of-buddha-cymbals-devas

Jayawardene, Wasantha, David Lohrmann, Ryan Erbe & Mohammad Tarabi. (2017), “Effects of Preventive Online Mindfulness Interventions on Stress and Mindfulness: A Meta-Analysis of Randomized Controlled Trials.” *Preventive Medicine Reports, Vol. 5*, 150-159. doi org/10.1016/j.pmedr.2016.11.013

Jesse, Robert. (2015), “A Survey of the Entheogens”, in *Zig Zag Zen. Buddhism and Psychedelics,* Allan Badiner (ed.). Synergetic Press. https://synergeticpress.com/catalog/zig-zag-zen-buddhism-psychedelics/

Kangaslampi, Samuli. (2023), “Association Between Mystical-type Experiences Under Psychedelics and Improvements in Well-being or Mental Health. A Comprehensive Review of the Evidence.” *Journal of Psychedelic Studies, Vol. 7, No. 1*, 18-28. doi.org/10.1556/2054.2023.00243

Kapstein, Matthew. (2011), “Buddhist Thought in Tibet: An Historical Introduction”, in *The Oxford Handbook of World Philosophy*, William Edelglass & Jay Garfield (ed.). Oxford: Oxford University Press, 245-264.

Laumakis, J. Stephen. (2013), “The Philosophical Context of Gotama´s Thought”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 13-25.

Letheby, Chris. (2021), *Philosophy of Psychedelics.* Oxford: Oxford University Press.

Longchen, Rabjam. (2001), *The Precious Treasury of the Basic Space of Phenomena.* Junction City (CA): Padma Publishing.

Loy, David. (2019), *Nonduality in Buddhism and Beyond.* Somerville (MA): Wisdom Publications.

Maillart-Garg, Meena & Winkelman, Michael. (2019), “The “Kamasutra” Temples of India: A Case for the Encoding of Psychedelically Induced Spirituality.” *Journal of Psychedelic Studies, Vol. 3, No. 2*, 81-103. doi.org/10.1556/2054.2019.012

Maturana, Humberto & Varela, Francisco. (1998), *The Tree of Knowledge. The Biological Roots of Human Understanding.* Revised edition [1987]. Boston: Shambhala.

McCarroll, Valeria. (2023), “Mysticizing Medicine: Incorporating Nondualism into the Training of Psychedelic Guides”, *Interdisciplinary Science Reviews, Vol. 48, No. 5,* 752-767. doi.org/10.1080/03080188.2022.2075199

McIntyre, Roger. (2023), “Is the Psychedelic Experience an Essential Aspect of the Therapeutic Effect of Serotonergic Psychedelics? Conceptual, Discovery, Development and Implementation Implications for Psilocybin and Related Agents”, *Expert Opinion on Drug Safety*, *Vol. 22, No. 10.* Published Online. doi.org/10.1080/14740338.2023.2253144

Nichols, E. David. (2016), “Psychedelics.” *Pharmacological Reviews, Vol. 68, No. 2,* 264-355. doi.org/10.1124/pr.115.011478

Nour, Matthew, Lisa Evans, David Nutt & Robin Carhart-Harris. (2016), “Ego-Dissolution and Psychedelics: Validation of the Ego-Dissolution Inventory (EDI).” *Frontiers in Human Neuroscience, Vol. 10, Article 269.* 1-13. doi.org/10.3389/fnhum.2016.00269

Olson, David. (2021), “The Subjective Effects of Psychedelics May Not Be Necessary for Their Enduring Therapeutic Effects.” *ACS Pharmacology & Translational Science*, *Vol 4*, 563-567. doi.org/10.1021/acsptsci.0c00192

Osmond, Humphrey. (1957), “A Review of the Clinical Effects of Psychotomimetic Agents.” *Annals of the New York Academy of Sciences, Vol. 66, No. 3,* 418-434. doi.org/10.1111/j.1749-6632.1957.tb40738.x

Osto, D. E. (2016), *Altered States. Buddhism and Psychedelic Spirituality in America.* New York: Columbia University Press.

Passie, Torsten. (2024), “A History of the European Medical Society for Psycholytic Therapy (EPT) 1964–1974.” *Drug Science, Policy and Law, Vol. 10*, 1-16. doi.org/10.1177/20503245231221154

Patrul Rinpoche. (2007), *A Brief Guide to the Stages and Paths of the Bodhisattvas*. Translated by Adam Pearcey. www.lotsawahouse.org/tibetan-masters/patrul-rinpoche/stages-and-path

Patocka, Jiri & Kocandrlova, Barbora. (2017), “Pharmacologically and Toxicologically Relevant Components of *Amanita Muscaria*.” *Military Medical Science Letters, Vol. 83, No. 2*, 122-134. doi.org/10.31482/mmsl.2017.020

Petrement, Mateo Sanchez. (2022), “Psychedelic Therapy as Reality Transformation: A Phenomenological Approach.” *Journal of Psychedelic Studies, Vol. 7, No. 1,* 36-47. doi.org/10.1556/2054.2023.00231

Payne, Jake, Richard Chambers & Paul Liknaitzky. (2021), “Combining Psychedelic and Mindfulness Interventions: Synergies to Inform Clinical Practice.” *ACS Pharmacology & Translational Science, Vol. 4, No. 2*, 416-423. doi.org/10.1021/acsptsci.1c00034

Pollan, Michael. (2018), *How to Change Your Mind. What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence*. New York: Penguin Press.

Powers, John. (2011), “Yogacara” in *The Oxford Handbook of World Philosophy*, William Edelglass & Jay Garfield (ed.). Oxford: Oxford University Press, 222-232.

Rescorla, Michael. (2020), "The Computational Theory of Mind", *The Stanford Encyclopedia of Philosophy,* Edward N. Zalta (ed.). plato.stanford.edu/archives/fall2020/entries/computational-mind/

Revonsuo, Antti. (2018), *Foundations of Consciousness.* New York: Routledge.

Rosenblat, Joshua, Marisa Leon-Carlyle, Shaun Ali, Ishrat Husain & Roger McIntyre. (2023), ”Antidepressant Effects of Psilocybin in the Absence of Psychedelic Effects.” *American Journal of Psychiatry, Vol. 180, No. 5,* 395-396. doi.org/10.1176/appi.ajp.20220835

Samorini, Giorgio. (2019), “The Oldest Archeological Data Evidencing the Relationship of *Homo Sapiens* with Psychoactive Plants: A Worldwide Overview.” *Journal of Psychedelic Studies, Vol. 3, No. 2*, 63-80. doi.org/10.1556/2054.2019.008

Sanders, W. James & Ziljmans, Josjan. (2021), “Moving Past Mysticism in Psychedelic Science.” *ACS Pharmacology & Translational Science*, *Vol 4*, 1253-1255. doi.org/10.1021/acsptsci.1c00097

Segal, V. Zindel, Mark Williams & John Teasdale. (2013), *Mindfulness-Based Cognitive Therapy for Depression*. Second Edition. New York: The Guilford Press.

Seth, Anil. (2021), *Being You. A New Science of Consciousness.* London: Faber & Faber Ltd.

Shapiro, Lawrence & Shannon, Spaulding. (2024), "Embodied Cognition", in *The Stanford Encyclopedia of Philosophy*. Edward N. Zalta & Uri Nodelman (ed.). plato.stanford.edu/archives/sum2024/entries/embodied-cognition/

Simonds, Colin. (2023), “View, Meditation, Action: A Tibetan Framework to Inform Psychedelic-Assisted Therapy.” *Journal of Psychedelic Studies, Vol. 7, No. 1*, 58-68. doi.org/10.1556/2054.2023.00255.

Sjöstedt-Hughes, Peter. (2023), “On the Need for Metaphysics in Psychedelic Therapy and Research.” *Frontiers in Psychology, Vol. 14,* 1-17. doi.org/10.3389/fpsyg.2023.1128589

Skilton, Andrew. (2013), “Theravada”, in *A Companion to Buddhist Philosophy,* Steven M. Emmanuel (ed.). Chichester (UK): Wiley-Blackwell, 71-85.

Smith, David Woodruff. (2018), "Phenomenology", in *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.). plato.stanford.edu/archives/sum2018/entries/phenomenology/

Smith, Malcolm. (2023), “Dzogchen: Ten Key Terms.” The Wisdom Podcast. www.wisdomexperience.org/wisdom-podcast/malcolm-smith-dzogchen-ten-key-terms-166/

Solano Lopez, L. Ana. (2018), “Effectiveness of the Mindfulness-Based Stress Reduction Program on Blood Pressure: A Systematic Review of Literature.” *Worldviews on Evidence-Based Nursing, Vol. 15, No. 5*, 344-352. doi.org/10.1111/wvn.12319

Solms, Mark & Turnbull, Oliver. (2002), *The Brain and the Inner World. An Introduction to the Neuroscience of Subjective Experience*. London: Karnac.

Strassman, Rick. (2022), *The Psychedelic Handbook. A Practical Guide to Psilocybin, LSD, Ketamine, MDMA and DMT/Ayahuasca.* Berkeley (CA): Ulysses Press.

Stoljar Daniel. (2021), "Physicalism", *The Stanford Encyclopedia of Philosophy,* Edward N. Zalta (ed.). plato.stanford.edu/archives/sum2021/entries/physicalism/

Tart, Charles. (1991), "Influences of Previous Psychedelic Drug experiences on Students of Tibetan Buddhism: A Preliminary Exploration." *Journal of Transpersonal Psychology*, Vol. 23, No. 2, 139–173.

Tattersall, Ian. (2013), *Masters of the Planet. The Search for Our Human Origins.* New York: St. Martin`s Griffin.

Thompson, Evan. (2020), *Why I am Not a Buddhist.* New Haven: Yale University Press.

Vago, David. (2022), "How Meditation Changes the Brain: A Neurophilosophical and Pragmatic Account", in *Routledge Handbook on the Philosophy of Meditation.* Rick Repetti (ed.). New York: Routledge, 174-191.

Varela, Francisco, Eleanor Rosch & Evan Thompson. (2016), *The Embodied Mind.* Revised edition [1992]. Cambridge (MA): MIT Press.

Wallace, B. Alan. (1999), "The Buddhist Tradition of *Samatha*: Methods for Refining and Examining Consciousness", in *The View from Within. First-Person Approaches to the Stude of Consciousness,* Francisco Varela & Jonathan Sear (ed.). Thorverton (UK): Imprint Academic, 175-187.

Walsh, Roger. (2015), "Mysticism: Contemplative or Chemical", in *Zig Zag Zen. Buddhism and Psychedelics,* Allan Badiner (ed.). Synergetic Press. https://synergeticpress.com/catalog/zig-zag-zen-buddhism-psychedelics/

Wickelgren, Ingrid. (2023), "Where Imagination Lives in Your Brain." www.scientificamerican.com/article/where-imagination-lives-in-your-brain/

Wiese, Wanja & Metzinger, Thomas. (2017), "Vanilla PP for Philosophers: A Primer on Predictive Processing", in *Philosophy and Predictive Processing*, Thomas Metzinger & Wanja Wiese (ed.). Frankfurt am Main: MIND Group, 1-18.

Yaden, David & Griffiths, Roland. (2021), "The Subjective Effects of Psychedelics Are Necessary for Their Enduring Therapeutic Effects." *ACS Pharmacology & Translational Science*, *Vol 4*, 568-572. doi.org/10.1021/acsptsci.0c00194

Zahavi, Dan. (2019), "Getting it Quite Wrong: Van Manen and Smith on Phenomenology." *Qualitative Health Research, Vol. 29, No. 6,* 900-907. doi.org/10.1177/1049732318817

Zahavi, Dan. (2018), “Brain, Mind, World: Predictive Coding, Neo-Kantianism, and Transcendental Idealism.” *Husserl Studies, Vol. 34,* 47-61. doi.org/10.1007/s10743-017-9218-z