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Psychonauticon: A transdisciplinary interpretation of psychedelic experiences

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A transdisciplinary interpretation of psychedelic experiences

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Content

Introduction

~~That is how we sorcerers operate. Not following a logical order but following analogical consistencies or compatibilities.~~[1]

How to describe and interpret psychedelic experiences when they essentially defy a discursive explanation? While experience transcends theory, which always lags behind, theory transcends experience as it connects to it, opens it up and makes it accessible in symbolic communication. Thus, in this book, I don't intend to think *about* psychedelic experiences but *according to* them. To think *according to* ~~of~~ *from* psychedelic experiences means to open their field from within to allow that the levels intersecting therein, and elements emerging therefrom, enter the structure of explanation. At the same time, my theoretical perspective must enter the meaning of my experiences. I assume in this book that the relation between theoretical description and experience is interdependent, i.e. that pure experience without interpretation doesn't exist and vice versa. Experience cannot be fully reproduced by description alone, and interpretation is inevitably a different kind of performance than the original experience. But the former doesn't exist without the latter. Any experience is always connected to an understanding and explanation, as well as the source of conceptually constructed explanation resides in experience.

The key methodological concept that can enable mediation between interdependent activities of making experience and understanding it is the concept of analogy. The relation of interdependence is one of confrontation as well, which takes the form of searching for analogies. For example, a typical feature of almost any psychedelic experience is dissolution of the autonomous subject and consequent loss of control over one's own experience, revealing our inner multiplicity. Reflecting this, I propose a multi-perspective approach, rather than a singular, dominant perspective taking precedence over the others. I therefore employ disparate explanatory strategies that follow different directions and resist~~s~~ unification. Nevertheless, all explanatory perspectives occupy the same space and delineate its boundaries. This methodology thus incorporates the notion of transdisciplinarity, i.e., the idea that different explanatory lines are

1 Deleuze, G., Guattari, F. 1987. *A Thousand Plateaus. Capitalism and Schizophrenia*, Minneapolis/London: University of Minnesota Press, p. 250.

complementary and influence each other. The intertwining of the disparate but communicating perspectives keeps the field of psychedelic experiences unstable and open, and yet interconnected.

Still, inasmuch as it is possible to identify a common thread in this work, I would express this as the following question: How to articulate experiences which not only defy expression in discursive and conceptual language, but also radically transcend and subvert the very laws of such language, for instance the law of contradiction. Psychedelic experiences are extremely difficult to convey linguistically in much the same way as the experience of dreaming or musical pleasure. Yet, we may address the experience indirectly by creating a theoretical web based on two types of explanation. The web I have in mind is on the one hand weaved from descriptions of those aspects of psychedelic experiences that are communicable, and, on the other, from multiple, diverse interpretations of the contexts, i.e. the conditions enabling these experiences, and the consequences they entail for our worldview and self-conception. Together with these methodological considerations, the explanatory web combines the following overlapping perspectives: 1) autobiographical, 2) psychonautic, 3) anthropological, 4) biological and 5) philosophical.

Autoethnographic approach

The autoethnographic explanatory line dates to the years 2008–2015 when I underwent and reflected on approx. twenty (+) self-induced psychedelic experiences. These constitute the experimental core data on which I will be drawing and the starting point of my inquiry. Most of what I claim about psychedelic experiences is directly or indirectly derived from this core. These experiences are situated into the overall biographical context, using the methods of autoethnography; i.e., descriptions and reflections of personal, social, and cultural motives related to my psychedelic praxis in contemporary society. I have chosen autoethnography for two reasons. Firstly, psychedelic experiences are essentially intrapersonal. An intoxicated person is subjectively involved in the stream of intoxication, and his or her consciousness undergoes transformation, both during the experience itself and as a result of the experience in the longer term. Second, our experiences don't occur in a vacuum. They take place at a certain time, and in a certain place, and are, therefore, related to a specific historical and cultural situation of an intoxicated person. The autoethnographical reflection thus attempts to consider a personal journey in a socio-cultural context, asking questions such as: Why and how did I encounter psychedelics?

How did they influence me? What were my experiences like? What is the place of psychedelics and psychedelic praxis in our society?
The autoethnographical approach also includes self-reflection of the scientific process. Scientific process is not an objective and unbiased representation of reality, but as a subjective, creative process. As an author, I am involved in this process not only theoretically or as an academic, but in the context of my total life endeavour. To write this book, I had to, in the end, get involved in this project physically, psychologically, economically, and socially. Psychedelic experimentation has influenced the way I think, feel, and act. It has influenced my family and other social relations. It has led me to unknown places and meetings with diverse kinds of people. Therefore, this text doesn't offer a detached impersonal description of the content and structure of psychedelic experiences, but a complex interpretation of personal psychedelic praxis as experienced from within, rather than just observed.

Since the book was originally submitted as a dissertation thesis in general anthropology, I was looking for a tenable anthropological method for tackling psychedelic experiences. And I found and employed several of them: analytical and evocative autoethnography[2], reflexive ethnography[3], the anthropology of experience[4], and transformative anthropology[5], which all conceive anthropological research as a form of transformative praxis, engaged action, and an active, dialectical co-formation of the research field. An anthropologist is a theoretician and at the same time immersed in the field as its inherent part.

The autoethnographical line also addresses one of the key problems of this kind of inquiry that of the subject of experience (the self). The Autoethnographical self is not an atomic person independent of its situatedness in

2 Anderson, L. 2006. Analytic autoethnography. *Journal of Contemporary Ethnography*. Sage Publications, 2006, 35 (4): 373–395; Chang, H. 2008. *Autoethnography as Method*. Michigan: Left Coast Press; Cooper, K., White, R. E. 2012. *Qualitative Research in the Post-Modern Era. Contexts of Qualitative Research*. Dordrecht / Heidelberg / London / New York: Springer.

3 Turner, V. W., Turner, E. L. B., eds. 1985. *On the Edge of the Bush. Anthropology as experience*. Tuscon: The University of Arizona Press; Bruner, E. M., Turner, W. V., eds. 1986. *The Anthropology of experience*. Urbana/Chicago: University of Illinois Press.

4 Robben, A. C. G. M., Sluka, J. A., eds. 2007. *Ethnographic Fieldwork. An Anthropological Reader*. Malden/Oxford/Victoria: Blackwell Publishing, p. 443–492.

5 Goulet, J.-G. A., Miller, B. G., eds. 2007. *Extraordinary Anthropology. Transformations in the Field*. Lincoln/London: University of Nebraska Press.

socio-cultural relations. He or she is a situated actor, who exists and acts inside a variety of pre-existing relational webs. His or her experience is possible only as situated, only under specific external conditions that contribute to the inward experience and determine what it is like for an experiential self to go through these experiences. This means that the meaning attributed to psychedelic experiences will vary according to the overall context in which they take place, i.e. they will be different for an Amazonian shaman[6] and for a member of a postmodern, industrialized and globalised society. From the autoethnographical perspective, the experiential self is not given as a univocal identity. Instead, the self emerges successively as a place of encounter and negotiation between personal, socio-cultural, and ecological contexts. My experiences are my own only partially as they are pervaded and shaped by historical conditions. These include socially conditioned expectations, moral codes, shared ways of thinking and action, etc., which affect the nature of my experience.

In sum, the role of psychedelic experiences is two-fold: firstly, they are the object of description and analysis; secondly, they serve as a methodological tool and source of analogies. While intoxicated, a person experiences him or herself as fragmentary, realising how individual layers of his self peel off: moral, social, emotional, bodily, cultural, and so on, until nothing remains but some empty, preconscious awareness, transformed by the psychedelic effects. The purpose of herein employed autoethnographical method is to show that the experiencing subject is not a complete master in his own house, and ~~whose~~ experience is determined by his involvement in the dynamic intertwined web of pre-existing relations. However, this complex intertwining doesn't mean that my experience with the world and my own self is not at the same time a private and singular event, which participates on the creation of relational webs. To put it simply, my psychedelic praxis, the way I treat psychedelics, is determined by what I have learnt from others, and at the same time my way of using psychedelics may enrich psychedelic praxis to be developed by others.

6 The complex theme of the contemporary shamanism and neo-shamanism is not addressed in this book, yet stays in the background. For basic orientation, see: Znamenski, A., ed. 2004. *Shamanism: Critical Concepts, 3 vols*. London: Routledge; Winkelman, M. 2000. *Shamanism: The Neural Ecology of Consciousness and Healing*. Westport: Bergin & Garvey; Gredig, F. 2009. *Finding New Cosmologies. Shamans in Contemporary Europe*. Zürich/Berlin: Lit Verlag.

Psychonautic approach[7]

Another explanatory line is the "psychonautic" one. The neologism "psychonautic" consists of two Greek words: "PSYCHE" (soul) and "NAUTES" (sailor), whose authorship is ascribed to Ernst Jünger[8]. In his highly allegorical thinking, the term undoubtedly relates to the word "argonaut", a hero who travels to the boundaries of the known world to discover a treasure with mysterious powers. A psychonaut is thus the one who travels the ocean of human psyche, which simultaneously serve as his own ship. A psychonaut immerses into the inner symbolic, sensual and emotional space of hallucinations, ecstatic raving or catatonic stupor induced by psychedelic substances to uncover the boundaries of human consciousness. I will use the term psychonautics to describe the type of psychedelic praxis typical for modern and postmodern societies, from the nineteenth century until today. The psychonautics thus means an experimental, non-ritualized use of hallucinogens for the purpose of scientific, philosophical, or artistic exploration of psychedelic experiences.

In this sense, psychonautics ~~form~~ to an entwined tradition that feeds from different roots, and whose unifying feature is non-trivial, thought-out, and intentional experimentation with psychedelics for the purpose of systematic study of these substances and experiences they induce. Psychonautics begins with the development of modern chemistry and pharmacology in modern industrial societies in the nineteenth century, promoting the strategy of versatile exploitation of environment, which was conceived as the source of progress and new technological enhancement of human life. Indeed, the first psychonauts were chemists who synthetized artificial versions of naturally occurring alkaloids such as morphine or mescaline. They were followed by physicians who had been researching the physiology of human sensory and nervous systems, and later by psychiatrists and psychologists. The connection between scientific and industrial (pharmaceutics) interests in the empirical research and utilization of psychedelics thus represent one of the main roots of psychonautics.

The second important source of psychonautics is the modern colonialism. Having discovered and explored new territories and non-European cultures,

7 The history of psychonautics represents a rich terrain that is still waiting for its systematic elaboration. I will return to the question of psychonautics as a recent context of psychedelic praxis in the contemporary society repeatedly. For basic orientation, see: Sessa, B. 2012. *The Psychedelic Rennaissance. Reassessing the role of psychedelic drugs in 21st century Psychiatry and Society*. London: Muswell Hill Press.

8 Jünger, E. 1970/2014. *Annäherungen. Drogen und Rausch*. Stuttgart: Klett-Cotta, p. 356–364.

modern Europeans became curious about new plants and substances, as well as about encounters with various kinds of ritualized ecstatic practices in many pre-modern societies. Travellers, merchants, adventurers, and last but not the least, anthropologists still form an important part of psychonautics until today. However, current post-industrial societies witness the opposite movement – the diffusion process when shamanic types of psychedelic praxis permeate our techno-informational cultures.

The third source of psychonautics can be found in modern art. Starting with romanticism, art has thematised the schism between the modern and traditional, and generally between culture and nature, to tackle the issues hidden in the depth of nature and human unconsciousness, the processes that escape the light of reason. This motive closely relates modern art to psychedelic experiences. This tendency to transcend the boundaries of reason, to derange senses and seek for limit experiences, including psychedelic ones, is present in the experimental ethos of modern art. Many psychonauts are therefore painters, musicians, or writers.

The last ingredient of this psychonautic concoction is philosophically oriented or speculative psychonautics, a rich variety of thinkers ranging from psychologists, philosophers, novelists, alchemists, modern mages and writing shamans, to original metaphysicians and casual authors. What they all have in common is the experience of a *psychedelic ~~shock~~* that made them confront their existing worldview and their self-understanding. They are theoretical psychonauts who believe that understanding the states of drug intoxication can be beneficial and useful for understanding human mind, culture, and religion. They are, to name only the most famous ones, important philosophical and literary figures such as Aldous Huxley, Ernst Jünger, Walter Benjamin, Jean Paul Sartre, Maurice Merleau-Ponty, William James, Havelock Ellis, Felix Guattari, Gilles Deleuze, Henry Michaux, Antonin Artaud, Charles Baudelaire, and many others.

In this book, I draw on this speculative tradition. I take the courage for such an enterprise namely in view of the contemporary "psychedelic science", which by now comprises a multitude of scholarly articles, studies and collective monographies, dissertation theses, institutionally organised research, and other activities in the wide spectrum of academic disciplines, ranging from physics to religious studies. In this light, I join this ongoing dialogue by addressing psychedelic experiences via the anarchic form of the transdisciplinary rhizome: a decentralized and non-hierarchical set of explanations, an intertwining of several explanatory lines without any central strain. This book presents an explanatory system with more independent centres connected by multiple links. Yet, I don't aim to formulate a uniform general theory of psychedelic

experiences. Instead, I want to uncover the domain of psychedelic experiences as the source of multiple interpretations, as a self-contained element which can't be fully expressed in words, but which can be addressed indirectly. It is an element one can think from and according to.

Another source of this inquiry is the experimental psychedelic use by so called recreational, or I would rather say, wild users who produce a rich set of descriptions of psychedelic experiences ranging from literary works to occasional reports and interviews on wide internet databases. This set includes the so called "drug protocols"[9][10], i.e. notes, descriptions, and records of impressions and images encountered during the experiences. Such testimonies complete the reports of my subjective experiences and represent the second source for the following theoretical considerations. My aim is to think from not only my own psychedelic experiences, but also those of others to delineate a field of corresponding possibilities, thus conceiving a model of the entire field by confronting and comparing experiences. My own experiences allow me to asses and falsify assertions of other users, and their descriptions and explanations become necessary correctives of my understanding. In other words, although psychedelic experiences can not be fully articulated, they are never purely private events since they are situated in particular discursive and practical context of actual psychedelic praxis.

Contemporary psychedelic praxis in Europe is rather complex. During the last twenty years[11], hallucinogens, and the experiences they induce became a subject of scientific research again. We can witness renewed interest in psychedelics in anthropology, psychology, psychiatry, addictology, neuroscience, archaeology, history, philosophy, and in many other disciplines whose purpose is to destigmatize psychedelics and critically evaluate them. At the same time, psychedelics have been quite dramatically spreading in wider society and have become linked

9 For the origins of this genre see: Benjamin, W. 2006. *On Hashish*. Cambridge/ London: The Belknap Press of Harvard University Press.

10 Beside many interviews I have conducted myself, I mainly used internet databases: *Erowid. Documenting the complex relation between Humans and Psychoactives* [online database]. Accessible from www.erowid.org; *Shroomery. Magic Mushrooms Demystified* [online database]. Accessible from www.shroomery.org; *Nyx.cz* [online database]. Accessible from www.nyx.cz; *Enpsyro. Encyklopedie psychotropních rostlin* [online database]. Accessible from www.biotox.cz/enpsyro.

11 See Sessa, B. 2012; Yensen, R., Dryer, D. 1992. Thirty Years of Psychedelic Research: The Spring Grove Experiment and its Sequels. Göttingen.; Walsh, R., Grob, Ch., eds. 2005. Higher Wisdom. Eminent Elders explore the continuing impact of psychedelics. Albany: State University of New York Press.

to various subcultures and their corresponding lifestyles. Nowadays, psychedelic experiences are reported by people from all social classes and wide range of social groups, including high school and university students, farmers, musicians, political activists, craftsmen, gardeners, artists, salesmen, as well as prosperous businessmen, IT specialists, bartenders, academics, or teachers.

This ample social distribution of substances that are mostly considered illegal and dangerous is no less than striking. Among other things, this phenomenon can certainly be related to the transformational processes in globalised information societies, namely the global availability of any goods, their easy accessibility and transport, and instant and incessant communication. Together, these aspects of globalisation support the rapid spread of various cultural practices and patterns of action across interconnected societies and facilitate extensive transcultural processes. Diverse types of psychedelic practices with their corresponding narratives not only radiate across individual societies but traverse the boundaries of different social and cultural spheres. Neo-shamanic practices spread throughout Europe from South and North Americas, Asia and Africa, and blend with the artistic, religious, psychotherapeutic, and spiritual tendencies of our times. Psychedelia meets Buddhist meditation[12], astrology[13], and tarot[14], it mingles with modern magic and sorcery[15], ecological thinking[16], or conspiracy theories[17], it intertwines with mysticism and postmodernism[18],

12 Konik, A. 2009. Buddhism and Transgression. The Appropriation of Buddhism in the Contemporary West. Leiden/Boston: Brill.

13 Grof, S. 2009. Holotropic research and Archetypal Astrology. *Archai: The Journal of Archetypal Cosmology*. Create Space Independent Publishing Platform, 1 (1): 50–56.

14 Eremitus, A. 2009. *The Psychedelic Tarot*. New York/Bloomington: iUniverse, Inc.

15 Hatsis, T. 2015. *The Witches' Ointment: The Secret History of Psychedelic Magic*. Rochester: Park Street Press; Dobkin de Rios, M. 2009. The Psychedelic Journey of Marlene Dobkin de Rios. 45 years with Shamans, Ayahuasceros, and Ethnobotanists. Rocherster/Vermont/Toronto: Park Street Press.

16 Brown, J. D., ed. 2009. Psychedelics and Ecology, MAPS Bulletin, XIX (1).

17 Irvin, I. 2014. Entheogens: What's in the Name? The Untold History of Psychedelic Spirituality, Social Control and the CIA. [online] Gnostic Media. Potent News. Accessible from www.gnosticmedia.com.

18 McHale, B., Platt, L., eds. 2016. *The Cambridge History of Postmodern Literature*. Cambridge/New York: Cambridge University Press.

with the paranormal research[19], electronic music[20], or cyberpunk[21]. As I read it, even this ad hoc list suggests that to unravel complexities on the socio-cultural level of the psychedelic domain represents a major challenge. Still, it is an indispensable step in my attempt to elucidate a more general cultural context for personal psychedelic praxis, and hence I pay attention to this psychonautic line throughout the entire text.

Anthropological approach

The context of psychedelic praxis interlinks the psychonautic line with the anthropological one, namely with the problem of relations between an individual, society and culture. The anthropological line develops in two directions. In particular, I seek to understand: 1) how sociocultural context influences psychedelic praxis, and; 2) how psychedelic experiences permeate society and influence its order. It is the task of cognitive anthropology which elucidates the relation between individual experiences and sociocultural processes. I set out to elucidate these interconnections and suggest that the relationship is hermeneutic, meaning that each individual experience is already formed and organized by patterns shared in society and culture; at the same time, these shared patterns are produced a reproduced at the level of individual cognition and action.

In this anthropological context, the relationship between experience, society, and culture can be also conceived as a relationship between live dynamic systems organized on different levels. Every individual and its lived world constitutes a living system that preserves itself in a dynamic equilibrium as it relates with its environment. The connection between individual lived worlds and collective structures is the connection between parts and a whole, existing in mutual co-dependency. Culture then represents a socially formed interface between a society and other artificial and natural systems that shape a landscape

19 Paraanthropology. Journal of Anthropological Approaches to the Paranormal, 2011, 2 (4); Luke, D. 2017. Otherworlds. Psychedelics and Exceptional Human Experience. London: Muswell Hill Press.

20 Brown, J. D. 2013. The New Science of Psychedelics. At the Nexus of Culture, Consciousness and Spirituality. Rochester/Vermont/Toronto: Park Street Press, pp. 266–300.

21 Leary, T. H., Horowitz, M. (ed.), Marschall, V. (ed.) 1994. *Chaos and Cyber Culture*. Berkeley, CA: Ronin Publishing.

inhabited by a collective. A culture represents a mode of habitation for a given society, it shapes how a society relates to other societies and non-human systems, how it negotiates its way of life with others.

There is a deep analogy between such conceptualisation of culture and the nature of psychedelic experiences. They are always personal and entail a profound perturbation of an individual living system. Psychedelics activate and bring forth the inner stream of our bodily sensations, emotions, and images, they allow us to access unconscious processes like hidden fears, conflicts, desires, ideals, or memories. However, since our consciousness is not a closed and purely internal process, but essentially our relationship with the world, the alteration of our consciousness also entails an alteration of our environment. And since the environment of an individual is interconnected with the environments of other beings, extraordinary subjective experiences tend to resonate through the shared world as well. Subjective psychedelic experiences thus have the capacity to penetrate the social and cultural environment, especially when a psychedelic praxis become widespread. Psychedelic experiences then acquire a cultural meaning, they can become sacred[22] or revolutionary[23].

Therefore, the general anthropological context of how we conceive of human experience is the focal point in this text. It works with the hypothesis that our understanding of human nature must include the idea that as humans we are also beings of hallucinations and dreams, ecstatic trance, meditative immersion, or psychotic disruption. In short, we are beings capable of achieving borderline experiences that are integral components of who we are as a species. Borderline experiences, such as psychedelic ones, demonstrate that our experiencing is not one dimensional, but potentially subject to many and varied states which differ in structure and content. From this perspective, our common everyday experience with the world is organized by individually, socially, culturally, and ecologically relative habitual patterns, and thus it represents an open set of dynamic processes whose integrity is constantly endangered by possible disorganisation. Borderline experience induced by psychedelic intoxication can be considered a menace in that they alter brain activity patterns including our orientation and movement when performing our daily activities. They can

22 Gordon Wasson, R., Kramrisch, S., Ott, J., Ruck, C. A. P. 1986. *The Persphone's Quest: Entheogens and the Origins of Religion*. New Haven/London: Yale University Press.

23 See interesting deliberations on the relation between psychedelics and revolution in Grey, Ch. 2010. *The Acid Diaries. A Psychonaut's Guide to the History and Use of LSD*. Rochester/Vermont/Toronto: Park Street Press.

also lead to a temporal disintegration of personal identity that disrupts our normal behaviour to even a greater extent. Our ability to integrate borderline experiences, use them for our own good, and include them as a component of a collective relational networks opens new perspective on human experience in general. From this perspective, humans are not simply rational and logical, but full of conflicts and contradictions; they are beings of ecstasy, rave, inebriation, dreaming, and insanity, and beings that experience death, hallucinations, or mystical vision, or connect to the inner void in meditation. Borderline experiences expose the limits of our normal everyday world, which suddenly appears as a fragile and temporary product of habit. In this context, to study psychedelic experiences means to study humans as beings of boundaries.

To investigate humans as beings of boundaries, I do not aim at formulating a general anthropological theory of borderline experiences; instead, I explore one experiential domain drawing on E. M. Bruner's anthropology of experience. Bruner describes this branch of anthropology as hermeneutical, interpretative, or symbolical anthropology and defines it by questions such as "How do individuals experience culture?" or, "*how are events received by consciousness?*"[24]. However, such formulations suggest that culture is nothing but a ready-made sum of things and events that can be represented in our mind. ~~This representationalist view thus turns an anthropology of experience into a study of inner representations.~~ This representational view[25] would reduce anthropology of experience to a mere study of inner representations. Nevertheless, culture can not be reduced neither to a system of cognitive representations, nor to a system of external entities since culture is both internal and external. Culture is a series of events that undergo a constant change, it transforms and even dies in dancing, working, speaking, love-making, eating, fighting, or getting dressed. It emerges in the process of our bodily encounters with the world and others. We constitute culture in daily activities of our lives, but these are not simply inner cognitive processes, but conscious actions directed toward our environment. Experienced culture is irreducible to an inner system of meanings, or the outer system of things, it emerges in between.

24 Bruner, E. M. 1986. Experience and its expression. In Bruner, E. M., Turner, W. V., eds. 1986, pp. 3–32.

25 For the critique of the representational approach, see: Hutto, D. D. 2013. *Radicalizing Enactivism. Basic Minds without Content*. Cambridge/London: The MIT Press.

Obviously, there is an inner, private layer of our experience with the world, that of "I always know that I know, I am aware of my thoughts and feelings", but these inner states constitute only one thread of the overall fabric of our experience. For example, even the innermost type of experience, such as pain, has its own way of outer expression like a grimace or a scream. Experience is always expressed somehow through our body or through other objects. Its expression in turn reveals experience to us, it makes it concrete, and is indispensable for forming its meaning. The meaning of an experience is therefore not enclosed within itself, because it is always open to the world in which it actively participates. All experiences make sense as expressions depending on certain context. They cause something and lead to something as they are embodied in a shared, collectively and culturally shaped space of words, events, pictures, and things.

In other words, an anthropology of experience should deal with experience in terms of pragmatics, praxis, and performance. It is the nature of any experience that it is not only conscious, but also performed in the world, and as such it constitutes culture as a type of praxis. Unexpressed experience resembles ~~un~~ unread text which remains silent and invisible because its meaning is not expressed and has no consequence in action. Only once it begins to operate through expression and context may an experience start spreading among more individuals, influence their behaviour, and become part of a collective network. The wider its influence, and especially its destabilizing potential, the more urgent is the need to repeat it and institutionalize it. In case of difficult and abnormal experiences such as psychedelic ones, a community always needs something what D. L. Williams calls "the consciousness contract"[26], a shared understanding of their meaning and of the way they penetrate a social web, influence institutions, rituals, artistic creativity, or politics.

Anthropological research into experiences, especially the psychedelic ones, cannot be conducted by observing someone else's experience from the outside. To understand forms of psychedelic praxis in contemporary society, the explorer will not achieve the research goal by providing only disinterested descriptions or conducting interviews. Any uninvolved and disinterested observation will simply miss the live experience, and the essence of what it is like to be on an "acid trip" will stay hidden. Therefore, a psychedelic explorer must get involved in the process itself. Nevertheless, however involved he or she may be, the researcher still needs to overcome the major obstacle, namely the ineffable nature

26 Lewis-Williams D., Pearce, D. 2005. *Inside the Neolithic Mind. Consciousness, Cosmos and the Realm of the Gods*. London: Thames and Hudson, pp. 37–59.

of such experiences. A psychedelic experience defies exact verbalisation and transcends what is utterable. Thus, a psychonautic explorers need to take on the "native's perspective", which means to intoxicate themselves, and refrain from the believe their sober perspective is somehow better than the intoxicated one. This step is essential, for it entails a profound transformation. As the authors of the *Extraordinary Anthropology*[27] state, once you are inside, the whole situation changes irreversibly. Once we gain the native's perspective, we can no longer believe in our former – civilized, sober, rational – views and preoccupations. The previous system of knowledge needs to be confronted with the experiences in the field, which may often require us to abandon some of our beliefs[28]. If we seek to reveal the new terrain of experience as such, and make it truly visible from inside, we need to let the intoxication enter our description, penetrate our narrative and transform it. It is, for example, impossible to understand the relation of Yanomami[29] to their epená drug or the relation of Balinese people[30] to their ritual dance, unless we enter the complex process of their experience, including the social, cultural, ecological and, of course, narrative structures, letting them transform our own situation.

The last thread of the anthropological line which involves investigation of culture as a process constituted in our experiential encounter with the world contains cognitive anthropology[31]. Cognitive perspective in anthropology shares the similar concept of culture with the anthropology of experience and autoethnography. However, cognitive anthropology isn't interested in personal stories and individual experiences; instead, it investigates general cognitive processes to determine their rules and how they constitute culture. What cognitive anthropologists agree on is "*a concern with culturally shared and variable distributed complex cognitive systems, including how such systems work, how they*

27 Goulet, J.-G. A., Miller, B. G., eds. 2007.

28 Fabian, J. 2001. *Anthropology with an Attitude: critical essays*. Stanford: Stanford University Press, pp. 2–5.

29 Peters, J. F. 1998. Life among Yanomami: The Story of Change Among the Xilixana on the Mucajai River in Brazil. Toronto: University of Toronto Press; Biocca, E. 1965. Yanoáma. Dal Racconto di una donna rapita dagli indi. Bari: Leonardo da Vinci.

30 Suryani, L. K., Jensen, G. D. 1994. Trance and Possession in Bali: A Window on Western Multiple Personality, Possession Disorder and Suicide. Oxford: Oxford University Press.

31 Kronenfeld, D. B., Bennardo, G., Munck, V. C. de, Fischer, M. D., eds. 2011. *A Companion to Cognitive Anthropology*. Chichester: Wiley-Blackwell, s. 1.

are structured, how they differ from one culture to another, how they are learned and passed on, and how they are adapted by people to contexts". Thus, cognitive anthropology is a fusion of a cognitive science focused on cognitive systems and anthropology focused on how such systems operate inside our cultural realities. The concept of cognition and cognitive system are crucial. I derive my interpretation of these concepts from theories that interpret cognition as situated, enacted, distributed, and extended. In a nutshell, it means that a process of experience (cognition) is neither enclosed in the brain nor in inner consciousness. In the same vein, cognition does not represent of the outside world in consciousness; instead, it is an activity of embodied beings situated in specific environments. Cognition is incorporated in our shared actions, in our dealings with objects and situations, and in communication. The introspective aspect of cognition is merely one of many aspects, a bundle of processes that is intertwined with the global processuality of our being in the world.

To conceive of culture as a process emerging in cognition means that on the one hand ~~that~~ a culture is distributed across the network of mutually acting and communicating individuals, while on the other hand, all cognitive processes are already formed by culture as a relatively autonomous system of habitual forms of corporeality, communication, and action. Being partially independent of individuals, this system transcends them in terms of time and space, integrates individual activities and makes them possible. This leads to the rejection of the difference between culture as something external and cognition as something internal, and to the acceptance of the E. Hutchins's claim that *culture is cognition*[32], as cognition is situated (corporeally, socially, and ecologically) and extended activity in the world.

The concept of extended and situated cognition then allows us to interpret psychedelic experiences anew. From this perspective, psychedelic experiences can-not be reduced to the inner and purely private psychic processes, to mere internal succession of images, thoughts, and incommunicable feelings. Interiority is always part of exteriority, they are intertwined, interconnected, as my interiority is always exteriority for others and for the world. In other words, my experience is always situated, and bound to specific situations, in which it can cause effects. Everybody~~,~~ who decides to undergo a psychedelic experience does so in a specific situation, and every situation arrives as an event in the contextual network – personal, social, cultural, and ecological. To enter such situation, to be engaged in it, has its consequences and generates further connections.

32 Hutchins, E. 2010. *Enaction, imagination, and insight*. In Stewart, J. R., Gapenne, O., Di Paolo, E. A. *Enaction: toward a new paradigm for cognitive sciences*. Cambridge: MIT Press.

Psychonautics serves as a good illustration of this approach. Psychonautics appears at certain borderline places in modern society – in science, in art, in transcultural transfer, in trans-cultural transfer, or in counter culture, places that are open to the coming of new. From these places, psychonautics successively spreads to a broader culture and allows for new forms of social and cultural self-organisation. This externalisation of psychedelic experiences means that they operate not only "in the heads" of psychonauts, but also embody themselves in their texts and other artefacts, in psychotherapeutic praxis, in journeys and encounters of various kinds, in laboratory research, and even in legal, economic, and political processes. Extensiveness and situatedness of psychedelic experiences means that they, similarly to other culturally significant experiences, become the organizing cores of our social and cultural space, call for specific handling techniques, and thus spread emotional, intellectual, and behavioural patterns. If these patterns are ignored, psychedelic experiences remain incomprehensible.

Ecosemiotic approach

Therefore, thinking from and according to psychedelic experiences is based on the concept of extended situatedness. From this standpoint, experience ceases to be a mere inner state of mind and becomes a situated activity of an organism in its environment. The fundamental context of our situatedness is our original bodily involvement in the world. All other dimension of our lived worlds – personal, social, symbolic, cultural – are built on this original one. Corporeal situatedness is biological and ecological. Physically, we are part of environments, we emerge inside them, as well as all other living beings. We develop from and consist of the bodies of our ancestors, we exist in incessant metabolic exchange with the environment, and we comprise the air, earth, water, electricity, plants, and animals we consume. Our physical bodies are not inanimate mechanisms, they perceive and experience, make choices and act as autonomous systems that temporarily emerge from our enabling and encompassing environment, from the intertwining of life and environmental processes, only to sink back into them when we die.

Such bio[33] or ecosemiotic[34] perspectives are indispensable for this study. Biosemiotics assumes that "life is cognition"[35]. It the broadest sense, cognition is then not the exclusive preserve of self-reflecting and symbolically communicating beings. Cognition is a common trait of all living systems which, as living systems, are endowed with self-referentiality, ability both to recognize the difference between themselves and the environment and to orientate themselves inside their environment. Ecosemiotics thus explains experience as something extended not only in a symbolic intersubjective network of conscious communication, but also in the networks of biological and ecological processes. Thus, my experience includes not only what I know and what I can put into words, but also what I don't know, what is happening outside of my direct consciousness on a pre-reflective level. My body is aware of itself and the world long before my self-conscious subjectivity, my personal self, is formed. But rather than being bound to a thinking subject as the exclusive centre, this corporeal cognition spreads within the whole body, in connection with other bodies in perception, metabolism and heredity, in self-experience that plays out on the level of neural and hormonal self-regulation.

From the ecosemiotic point of view, an individual mind is not just a knot in cultural webs of communication and symbolic semiotic processes. It is also a transformative node, a switching device in webs of life, webs of molecular, cellular, organic, organismic and intercorporeal communication. The description of psychedelic experiences from this position provides a satisfactory explanation for at least two aspects: 1) the fact that a chemical substance may change a "state of mind", and 2) the fact, that psychedelic experiences contain also so called transpersonal experiences, i.e. aspects of psychedelic experience that can-not be derived from personal history or from any other waking experience I could have had. Consequently, one of the main hypotheses in this text is that throughout psychedelic experience, the conscious, self-controlling ego sustains temporal disintegration, and that such loss of conscious self-control gives access to the pre-reflective level of experience (intertwining), so that the

33 Favareau, D., ed. 2010. *Essential Readings in Biosemiotics. Anthology and Commentary*. Dordrech / Heidelberg / London / New York: Springer.

34 Siewers, A. K. ed. 2011. *Re-imagining Nature. Environmental Humanities and Ecosemiotics*. Plymouth/Lanham: Bucknell University Press; Hess-Lüttich, E. W. B., ed. 2006. *Eco-Semiotics. Umwelt und Entwicklungs-kommunikation*. Tübingen/Basel: A. Franke Verlag.

35 Maturana, H. R., Varela, F. J. 1980. *Autopoiesis and Cognition. The Realization of the Living*. Dordrecht: Reidel, p. 13.

networks of signals, pictures, patterns, and processes that are normally beyond our grasp come into direct awareness.

Philosophical approach

The last theoretical perspective is philosophical. This work was originally conceived as a philosophical exploration of psychedelic experience. To explain the concept of psychedelic experience from the philosophical point of view entails explanation of the concept of psychedelics, together with the concept of experience. The concept of experience as applied in this text can be preliminarily defined as a multiple complex system of living activity organized from more centres and on more levels. Such understanding of experience is inspired by a particular form of philosophical rationality that stretches back to pre-Socratic beginnings but has not been developed properly until the twentieth century.

This type of philosophy started with Heraclitus's fragment B2, that says: "*Though the logos is common, the many live as if they had a wisdom of their own*"[36]. The philosophical interpretation of psychedelic experiences relates to the question, in what sense is my personal consciousness a part of the "*common logos*" of all life. This common (Bio) Logos as the condition of possibility of every individual experience which is its manifestation never appears all at once and as itself. It appears, in Heraclitean terms, as a lightening, as a divine fire, as a tension in the harmony of opposites. The Logos hides in the game of opposites, speaks only in metaphors, and can't be uttered directly. It is apparent in the continuity of transformations as a premonition of their mutual relationship and dwells within the fabric of time.

The mapping of the domain of psychedelic experiences proposed in this text must account for phenomena that transcend limits of personal consciousness, and, from the perspective of everyday individual experience, seem incomprehensible. Such phenomena include: memories of someone else's past[37], visions of imaginary inner landscapes organized according to unknown laws and inhabited by alien entities[38], visions of bright light divin-

36 Kratochvíl, Z. 2006. *Délský potápěč k Hérakleitově řeči*. Praha: Herrmann & synové, p. 372.

37 Grof, S. 1988. *The Adventure of Self-discovery*. New York: SUNY, pp. 47–53.

38 See *DMT Entities Symposium* [online]. *Breaking Convention*, University of Greenwich, 2015. Accessible from 2015.breakingconvention.co.uk.; Pinchbeck, D. Entities and the Future of Science [online]. Futurethinkers.org. Accessible

ity[39], as well as hellish darkness[40], imaginary travels to the beginning of life[41] and beyond the boundaries of death[42]. They also include repeatedly reported experiences of merger with the entire time-space and dissolution in it. In the course of psychedelic experience, the conventional personal self dissolves, the boundary between the inner and outer disappears, and the hidden common "logos" becomes apparent. Nevertheless, the distinction between the inner and outer is presupposed by the discursive language which renders an appropriate expression of psychedelic experience unattainable. They can be therefore expressed only indirectly by means of analogical thinking from and according to experience.

The "Heraclitean" line was further developed in the twentieth century as a hermeneutic philosophy of situatedness. Such philosophy thinks beyond the principle of subjectivity and starts to think from the being in the world, from Heidegger's thrown project, or Merleau-Ponty's perceiving corporeity. It is a philosophy that builds on the fact of our intertwinement with a particular place and time. From this point of view, humans exist as beings that create and transform their environment and themselves from inside an embodied historical situation which they cannot leave, and which never ceases to determine who they are. Such philosophy thinks beyond the principle of identity articulated by A. Kliková as follows:

It is obvious that the principle of identity allows for the kind of thinking in which human being thinks itself through its essence, communicates with other beings who think in the same way and arrives to a consensus. The principle of identity determines human being as a "place" where thinking acknowledges itself in the form of a pure immediate evidence and this way grasp the truth of being.[43]

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from futurethinkers.org/danielpinchbeck-dmt-entities-future-science; Luke, D. 2017, chapter 5: *Discarnate Entities and DMT*, pp. 85–100.

39 Kirchhoff, J. 2002. Die Anderswelt. Eine Annäherung and die Wirklichkeit. Raum, Zeit und Selbst in veränderten Bewustseinzuständen. Klein Jasedow: Drachen Verlag, p. 240–273.

40 Biro, S. 2011. *Hellucination. A Memoir*. USA: Unearthed Book.

41 Grof, S. 1992, p. 74–100.

42 Strassman, R. 2001. DMT: The Spirit Molecule. A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences. Rochester: Park Street Press, pp. 220–232.

43 Kliková, A. 2007. Mimo princip identity. Praha: Filosofia, p. 380.

Thinking beyond the principle of identity leads to the question whether it is still possible to speak about a "self" as a departure point for construction of identity. An answer to this question must necessarily stay ambivalent, since the principle of identity can be neither fully denied, nor fully confirmed. On the one side, I experience myself as a unity of my own history and conceive of myself as identical individual. However, on the other side, "*to be myself does not mean to control something permanent, including our attitude to the environment. Also, it does not mean that I have some identifiable essence or an intrinsic attitude to the world. The very fact that there is always something intangible in every action (or effect of force) reveals the presence of identity as an inner limit of my experience, as a boundary of my power. Identity comes about as intensity of a relevant force, and consequently it also includes the self-loss and the renewal of force which originates in an outer force of the substrate that transcends it*".[44]

I believe that to understand psychedelic experiences requires a notion of self (a subject of experience) that is not exclusive centre and ~~a~~ sovereign of experience, but rather a participant of ongoing situation, an aspect in the network of forces and relations, in the network that is always present and precedes me. We can therefore say with Martin Nitsche that "*to localize position of human experience does not mean to seek some place as a point of departure, but to determine (methodically access) phenomenological field of experience. And only than some points can be established as starting points. According to our interpretation, it does not hold that a point (sub-i-ectum) is the foundation of the field, but on the contrary the field represents space for starting points and positions of subjectivity*"[45]. From this perspective, subjectivity is formed by relations on which it participates and from which it emerges. Through these relations, we are actively, as well as passively connected to the world on every level of our existence. Such relations are forces that affect us and through which we affect our environment, they are multiple and intertwined.

My attempt to interpret the nature of psychedelic experiences philosophically combines the Heraclitean thinking of being as a transforming flux with Merleau-Ponty's philosophy of inter-corporeality formulated, besides other texts, in his lectures on philosophy of nature where he draws on, besides many other sources, Whitehead's philosophy of nature, and asks: "*But why does Whitehead speak about the 'process of nature', rather than merely about nature?*" The reasons are following:

44 Kliková, A. 2007, p. 367.

45 Nitsche, M. 2013. Metodická priorita fenomenologického pole v transformativní fenomenologii. *Filosofický časopis*, 61 (6): 896.

1) Nature's nature is time? (Nature has the character of time): It passes as the time passes.

2) Nature is always a process: A man can grasp only its appearing forms, while these forms of appearance never deplete.

3) It is necessary for nature to proceed. There is not nature on the hand, and its flow as an attribute on the other. Nature is pure process (flow). It is comparable to the being of a wave, whose reality is only global, and never partial.[46]

Nature conceived as "undulation" of life is never accessible as a whole but only in its parts which are not stable things fixed in themselves, but ongoing events related to the global movements of the world. Merleau-Ponty relates processual philosophy of nature to a different conception of time-space, and to the overall different ontology, to the ontology that derives being from process and identity from difference. Neither time, nor space are from this perspective objective dimensions existing independently on the processuality of life. They are dimensions of nature that emerges within and throughout singular events of mutually intertwined lives. Thus, time and space are neither the forms of subjective view, nor objective dimensions, they exist in between, an intertwining; the multi-layered processuality of life unfolding from itself. We, and everything alive as well, are included in it and co-create it in our actions. Singular events joined together in the global network of the world are not atomic. They are always parts of a broader situation, always composed of and connected to other events. Thereby, M. Andrle sums up the essence of event in his interpretation of Whitehead in the following way:

In a sense, an event is the whole room in the moment I am there. If there is a cat in the room, the respective part of her life is also an event. I can consciously restrict my awareness to gradually smaller (smaller and smaller) events inside the room, inside the table, or inside the cat. Events of the cat's organism constitute its life. Events creating the table the cat sits on constitute the life of the table. Universal correlation and signification (that allows for any anticipation) provides the possibility to suppose that the inside of a table which is momentarily inaccessible to my sight, or other senses, not only exists but exists as related to larger or smaller events which constitute it or of which it constitutes a part.[47]

46 Merleau-Ponty, M. 1995. Die Natur. Aufzeichnungen von Vorlesungen am Collége de France 1956–1960. München: Wilhelm Fink Verlag, p. 172.

47 Anderle, M. 2010. Whiteheadova filosofie přírody. Červený Kostelec: Pavel Mervart, p. 122.

Such philosophy of processuality that thinks beyond the principle of identity, and hence also beyond the principle of subjectivity finds its specific expression in the philosophy of G. Deleuze and F. Guattari. To explain psychedelic experiences, I borrowed from them the concepts of territory, deterritorialization a reterritorialization. Normal, waking experience is always territorialized, i.e. it is occupied and stratified by ecological, social, and symbolic systems, by systems of prohibitions, boundaries, and dualities. Given that, I consider psychedelic experience to be experiences of deterritorialization. Throughout such experiences, the firm structure of the self decomposes and dissolves, the same happens to the subject – object difference. My experience becomes "schizophrenic", i.e. instead of being controlled by a central self, it is organized around a multitude of emerging motives, forces, and centres. As my experience loses this centralized organization, it becomes liquid and unstable. Even a simple perception of an object turns into a vibrant flow, and consequently the stabile outside world turns into oscillating, resonating, and constantly transforming milieu that contains me as its moving part. I become a part of stream of flowing experience that becomes indistinguishable from the stream of reality. I am immersed in the flow of experienced reality which undulates and vibrates, decomposing me into a multiplicity. Hitherto, relatively closed, stabile and clear experience of myself and the world suddenly appears to be fundamentally open, always transforming set of habitual patterns and movements.

Following Deleuze and Guattari, we can say that psychedelic experiences open the molecular plane of immanence where "perception will no longer reside in the relation between a subject and an object, but rather in the movement serving as the limit of relation, in the period associated with the subject and object. Perception will confront its own limit, it will be in the midst of thins, throughout its own proximity, as the presence of one haecceity in another, the prehension of one by the other or the passage from one to the other: Look only at the movements"[48]. Subsequently, this change of perspective leads Deleuze and Guattari to the question: "Are there even knights of narcotics, in a sense that faith is a drug? These knights claim that drugs, under necessary conditions of caution and indispensable experimentation, are inseparable from deployment of a plane. And on this plane not only are becomings-woman, becomings-animal, becomings-molecular, becomings-imperceptible conjugated, but the imperceptible itself becomes necessarily perceived at the same time as perception becomes necessarily molecular"[49].

48 Deleuze, G., Gutttari, F. 1987, p. 282.

49 Ibid.

A "narcotic" in this text necessarily denotes a drug experience, plausibly a psychedelic one, and such experience is characterized by the situation when "*the imperceptible itself becomes necessarily perceived at the same time as perception becomes necessarily molecular*". What does it mean that perception becomes molecular and imperceptible becomes perceived? In Deleuze and Guattari, molecular is the opposite to molar. The molar plane is populated by completed wholes, by things and beings endowed with definite identity that however exist on the molecular plane as movements, or as processes of formation, as lines and connections. These movements and processes are normally imperceptible, but, they can be perceived during a psychedelic experience. It is as if the inner, molecular structure of my experience becomes transparent, in the sense that I can perceive its ongoing dynamic arrangement. Under the influence of a psychedelic, a simple colour perception transforms into an oscillating undulation around a particular part of the spectrum, the colour is not one, and it appears as composed of colour fluctuations. A moving object may be perceived as continuity of successive phases with the head of protentions, and the tail of retentions. A face in a mirror breaks up into its various expressions without being able to appear as one. Self-identity loses its unity and dissolves into autonomous persons and motives. An intoxicated person perceives imperceptible components of its own perception, he or she perceives things from the molecular level of processuality, from the plane of becoming; things that escape our normal awareness focused on identifiable molar units.

Deleuze and Guattari hold that, "the issue of drugs can be understood only at the level where desire directly invests perception and perception becomes molecular at the same time as the imperceptible is perceived. Drugs than appear as the agent of this becoming. This is where pharmacoanalysis would come in, which must be both compared and contrasted to psychoanalysis"[50]. It is appropriate to compare pharmaco-analysis to psychoanalysis because they both deal with the molecular level. It is critical to contrast them, because, according to Deleuze, the traditional Freudian psychoanalysis understands the unconscious as something imperceptible, something that speaks only in symptoms and signs, but its true nature remains hidden. It is one of the reasons why psychedelics were and again are important in psychotherapy. They facilitate a direct contact with unconscious processes and contents. They allow them to enter the field of direct awareness, no longer as mere dream signs, jokes or mistakes, but more or less directly in the frame of psychedelically transformed experience which can be described as follows:

50 Deleuze, G., Gutttari, F. 1987, p. 283.

…drugs eliminate forms and persons, if we bring into play the mad speeds of drugs and the extraordinary posthigh slownesses, if we clasp one to the other like wrestlers, if we confer upon perception the molecular power to grasp micro perceptions, micro operations, and upon the perceived the force to emit accelerated or decelerated particles in a floating time that is no longer our time, and to emit haecceities that are no longer of this world: deterritorialization, "I was disoriented…" (a perception of things, thoughts, desires in which desire, thought, and the thing have invaded all of perception: the imperceptible finally perceived).[51]

Thus, to think from psychedelic experience means to think the process of deterritorialization. Such thinking departs from an analysis of experience, but it doesn't bind it to a complete and unambiguous subject, but rather to the situation of intoxication itself in whose course the subject becomes multiple and appears to be an intertwining or a temporal congruence of many events that occur on more interconnected levels – biological, personal, social, cultural, or ecological. Therefore, to argue that psychedelic experience establishes a direct connection with the unconscious doesn't mean to say that we can observe and describe unconsciousness as an autonomous and objective entity. Instead, it means that during a psychedelic intoxication we can perceive that our normal, articulated consciousness is the result of sub- and supraliminal processes, events, intensities and speeds that run through it and shape it. Hence, ~~it~~ this work I attempt to weave together individual threads, lines, levels and planes that run through and shape psychedelic experience.

51 Ibid.

Autoethnographic prelude

The plot[52]

Any application of psychedelic substance has its prelude and occurs in a situation. A prelude comprises personal history that led to the decision to undergo such experience. A situation is determined by time, location, and eventually other people. The immediate motive to ingest psychedelic substance may be random, but it necessarily relates to the preceding course of life, and usually impacts its further direction. Every intoxication occurs at a specific place and in a specific historical, socio-cultural, and personal context. I therefore conceive psychedelic experience as an encounter that makes a part of a plot in an individual storyline that is again a part of other broader context. A plot is a crossing of at least two intersecting trajectories in an environment. Environment determines possibilities of movement and sets out possible trajectories and hence potential plots. Simultaneously, trajectories that run through each environment are constitutive of it in the sense that every environment is already occupied by previous configurations, demarcated by movements and actions of other actors. In other words, environment is territory.

The plot of psychedelic experience in the contemporary Czech society is an intersection of at least three different trajectories: a life story of intoxicated person, a mediator 's trajectory and the line of psychedelic substance. First-time psychedelic users must meet an intermediary, someone who is able to obtain and distribute the substance. It is usually a person familiar with psychedelic praxis, ideally a person who knows the risks and advantages of psychedelic states and can assess who and under what circumstances is eligible for such experience. In fact, almost anyone can become an intermediary: an unknown man at a party who suddenly appears from the dark and asks you:

52 Here, I draw on M. Petříček's ontological concept of the plot, see Petříček, M. 2000. *Majestát zákona. Raymond Chandler a pozdní dekonstrukce*. Praha: Herrmann & synové, p. 132–148.

„ Would you like some squares?[53] “; a friend who knows a trustworthy dealer, an experimental psychiatrist or a shaman offering the substance at a neo--shamanic ceremony.

A first time psychedelic user must meet at least one basic condition, he or she must be willing to take a drug, i.e. a substance that is perceived as potentially harmful in our society: as something toxic, disqualifying us in normal communication and daily life, and leading towards addiction and crime. Ingestion of a drug connects the intoxicated person with the trajectory of the substance that always opens within a certain configuration. Such configuration comprises persons who already went through psychedelic experience before, and situations reserved for using psychedelics. Trajectory of a substance also relates to a certain name and its connotations, it comes already stratified by the symbolic system of culture, by the system of shared meanings and rules. It can be called intoxicant, drug, cure, sacramentum, or therapeutic tool, depending on the socio-cultural context. Psychedelic substance is therefore not an inert entity but an acting force. It enters relations opened in actions of individual users, it binds with their metabolism and nervous system, induces transformation of experience which is shared by more individuals thus establishing cultural artefacts (parties, sessions, art, ceremony etc.) and social institutions (rave culture, neo-shamanism, etc.).

Therefore, the overall meaning of psychedelic experience significantly differs depending on the configuration. Its meaning, course and phenomenal content is different for a Peruvian Ashaninka[54] unaffected by modern civilization who uses natural psychedelic called ayahuasca in the company of a “curandero“ to establish a practical relationship with natural spirits; or for an European adolescent, who “takes a trip“ with his friends on a party to amuse himself; or for a psychiatric client who participates in a psycholytic[55] session.

53 „Square“ is a slang expression for the square of hard paper containing LSD. See Blotterart.com [online] The world’s largest selection. Accessible from blotterart.com.

54 Sachahambi. 2008. What indigenous groups traditionally use Ayahuasca? [online] Ayahuasca.com. Accessible from www.ayahuasca.com/spirit/primordial-and--traditional-culture/what-indigenous-groups-traditionally-use-ayahuasca/.

55 The contemporary therapeutic discourse discriminates two basic types of therapy that uses psychedelics: psycholytic and psychedelic. See Hill, S. J. 2003. *Confrontation with the Unconscious. Jungian Depth Psychology and Psychedelic Experience*. London: Muswell Hill Press, pp. 17–28; Fischer, F. M. 2015. *Therapy with Substance. Psycholytic psychotherapy in the twenty first century*. London/New York: Muswell Hill Press.

The specific structure of socio-cultural environment represents the context on which a personal experience depends; it is always a unique, even creative[56], event but moulded from the shared sociocultural matter.

This autoethnographic prelude will therefore explain what kind of plot had developed in my own case. For this purpose, I use the autoethnographic method that is based on several types of writing about ethnographer's experience in the field. Autoethnography rejects the notion of an disinterested observer whose relation to the observed phenomena is that of outsider and upholds such description which integrates ethnographer's own experience into the description of the field. Autoethnography also rejects the idea that the studied field is simply given as pre-existing, objective, and independent on the observer; instead, it concentrates on the process of establishing a field in interaction between the anthropologist and studied sociocultural phenomena. Autoethnography, according to Reed-Danahay[57], is neither pure biography, nor pure ethnography but a relation of both that bridges the gap between the individual and society, between the subject and the object of description. Reed-Danahay defines autoethnography as a self-narrative which situates subjective experience within the shared social context. A person as a subject is not an enclosed in-dividuum, but rather a dividuum, a multiplicity existing in a shared environment which forms it, and which is reciprocally co-formed by its actions.

In this prelude, I intend to draft my personal trajectory which led to the decision to experiment with psychedelics, and to explore and interpret psychedelic experiences. Thus, the description of my personal journey intertwines with the deliberation of the theoretical context of my writing. As this text thinks from, in accordance, and also in tension with the field of psychedelic experience, I will therefore follow the double process of establishing this field, in experience, as well as in theory. I will describe and analyse the personal prelude, and the concurrent evolution of my theoretical approach. My personal history of psychedelic exploration is inseparably intertwined with the formation of the theoretical perspective. This perspective builds upon the methodological tautology: to explore experience from inside cannot be done from the position outside the experiential field. An autoethnographer is involved in the dialectics

56 B. Shanon interprets psychedelic experience as a creative event in the final part of his monumental study, see Shanon, B. 2002. *The Antipodes of the Mind. Charting the Phenomenology of Ayahuasca Experience*. Oxford/New York: Oxford University Press, pp. 399–402.

57 Reed-Danahay, D. E. 1997. *Introduction*. In Reed-Danahay, D. E. 1997. *Auto/ethnography: Rewriting the self and the social*. Oxford: Berg Publishers.

of the field[58] in that manner that, on one hand, the field is constructed by his descriptions, and, on the other hand, it enters the description as its source.

Thinking from and according to psychedelic experiences is thus based on three fundamental hypotheses. The first hypotheses states that there is no pure psychedelic experience uncontaminated with existing explanations, prejudices, preunderstanding, and the overall lifestyle, and that the meaning of experience depends on a particular historical and sociocultural context. The second hypothesis states that to undergo psychedelic experience also means to accept its explanation. The third hypothesis asserts that the theoretical perspectives on experience employed in this text (autoethnographic, psychonautic, anthropological, philosophical) adapts to experiences in an attempts to explain it. This text therefore aims at establishing such explanatory framework that won't subdue psychedelics experiences to the pre-existing categories but will think analogically to them.

Avant-garde, the Velvet revolution and underground

I started experimenting with psychedelics and studying them in 2008, yet my psychedelic trajectory has much earlier origin. Its beginning can be traced back to the liminal period of adolescence between the years 1989–1995. This period turned out to be liminal also for the entire Czech society. A liminal event can be, following A. Szakolcai, called *transformative*:

> Transformative event, as a technical term for sociological analysis, can be defined as something that happens in real life, whether for an individual, a group, or an entire civilization, that suddenly questions and even cancels previously taken-for-granted certainties, thus forcing people swept away by this storm to reflect upon their experiences, even their entire life, potentially changing not only their conduct of life but their identity.[59]

58 For the „dialectics of the field" see Rabinow, P. 1977. *Reflections of Fieldwork in Morocco*. Berkeley / Los Angeles / London: University of California Press, p. 38.

59 Szakolcai, A. 2009. Liminality and Experience: Structuring transitory situations and transformative events, in *International Political Anthropology*, 2 (1): 141–172, p. 158.

On the personal level, a liminal period implies questioning one's own identity and searching for a place within society. It comprises awakening of self-reflection and uncovering one's self as problem and task. Regarding me and my peers, this phase of our lives collided with the post-communist transformation of entire society, and even with the transformation of the global civilization that followed the collapse of bipolar world and shifted us inexorably towards the globalised information society.

I spent the first two years of this period studying at high school, where, among other things, I fell in love with modernist art and poetry. The immediate fascination with symbolism, surrealism, or dada whose liminal aesthetics transgresses the boundaries of language, reason and conventional morals became decisive in this transformative period of my life. Modernist aesthetics works with experiment, disassembles traditional patterns, invents new modes of expression, tests the boundaries of language, and recodes it. From the modernist perspective, art is not some ideal and harmonic representation of reality, but its reinvention. Such perspective on art is closely analogous with the personal development during adolescence. If an adolescent wants to become adult and prosper in the upcoming life, he or she needs to shift from the stage of reception and imitation to the stage of self-actualization. This shift is experienced as a crisis that stems from the conflict between disintegrating past and unsettled, rapidly changing future. The same transformative liminality applies ~~for~~ modernist aesthetics since it concentrates on the social and cultural antagonisms and involves destruction and deconstruction of the old perceptual, behavioural, and intellectual patterns together with the development of the new ones. Such intertwining of the personal and cultural changes shows that a personal trajectory cannot be viewed as a separate line but as a complex story shaped by the sociocultural processes which it correspondingly co-shapes as their constitutive part. Thus, the avant-garde art and literature brought a new context to my personal life, a wider dimension of my existence that I had to cope with. It brought the question of how to embrace culture that produces *poètes maudit*, its own severe critics who refuse to accept the bourgeois order of industrial society and attack its language and norms.

Above that, this aesthetic and existential conflict between the individual and society unfolded simultaneously with the transition to democracy and global free market economics, which is to a completely new socio-cultural order. On the personal level, I underwent the process of separation from mother and the childhood environment of an industrial village, consequential re-connection with the missing father, and transition to the cultured urban environment of the district town where I attended the high school.

This multiple liminality inspired my first literary attempts, published, thanks to my friends, as two collections of experimental surrealist poetry. Without being aware of the fact, it was my first connection with the artistic branch of psychonautics, because the authors that inspired me, such as E. A. Poe, Ch. Baudelaire, A. Rimbaud, J. P. Cocteau, G. Apollinaire, M. Ernst and many other modernist poets and artists deliberately employed sense derangement and drug induced alteration of consciousness in their works.

As I graduated from the high school in 1992, the communist regime and culture further deteriorated, and the bipolar world fell apart. The consequential opening of political and symbolic boundaries was one of the most important thing of our lives. The fall of the iron curtain came along with the rich cultural export and the freedom to travel. Visiting foreign countries became customary for everyone, not just for adolescents. People from the West and the East started to pour to our country, bringing various cultural influences. Following the ongoing inversion of political and economical values, the West-European and American influences were much stronger ~~that~~ those from the East. Our pro-western orientation was further reinforced by the returning Czech immigrants who intertwined with the Czech dissent circles and underground culture. During this extraordinary liminal period, the former dissent and underground movement merged with the western counter-cultural groups and movements to produce a phenomenon called "alternative culture". As the young generation, we were strongly influenced by music, from rock and jazz to punk and nascent electronic music. The uncensored musical streams penetrated the Czech cultural landscape with new rhythms and melodies, with altered frequencies and intensities that keenly contrasted with the frequencies and intensities of the "normalisation era" in the 1970s and 1980s.

Recovery of the free literary market was no less important. The stream of translations, new and old editions of classical works, public editions of "samizdat" and underground texts started to flow through Czech Republic, whereas the whole current crystalized in the nodes of literary and cultural magazines such as *Vokno*, *Revolver Revue*, *Analogon*, *Živel*, or *Prostor*, offering rich scale of literary production from poetry to philosophy, and from politics to magic. At that time, I was strongly influenced, together with many of my contemporaries, by the crossover of the Czech underground poetry-music--prose-philosophy (Egon Bondy, Ivan M. Jirous, Pavel Zajíček, Plastic People of the Universe, J. H. Krchovský, brothers Topol, etc.) and the beat and hippie literature-philosophy-poetry-politics (K. Kessey, J. Kerouac, W. Burroughs, A. Ginsberg, T. Leary, Ram Dass, and others.)

This information tide nurtured the further unfolding of the liminal--transformative situation and led to opening the stream of creativity, the Czech post-totalitarian culture started to emerge. I became a part of this process already during the high school years as I joined my peers who were actively involved in the autonomous musical, literary, and artistic scenes. Every major city in the country underwent similar process in the 1990s. Everything was new then and tempting: concerts, clubs, theatres, magazines, parties, exhibitions, discussions, loves and friendships. It was suddenly possible to live and create independently, regardless of the dying world of our parents and the state, regardless of the old ideologies and useless social norms which had no part in our lives any more. In such cultural climate, the old social structures were unravelled and shaken, and consequently new autonomous subcultural groups appeared. Many people were, more or less actively, involved in some kind of "scene", and the motto of our lives that happened to crystallize in the title of a D.I.Y. magazine was "Different Life"[60]. Different life became our purpose. We sought a life that was different than the normal life of school, work, and the past. Anything unrestrained and unusual was important, anything transgressing common everyday experiences and liberating us from daily routines was welcomed.

The opposition to the normalized past combined, in my case, with the love for modernist poetry and underground culture of all kinds, and with the widespread critique of the period called "normalization". At that time, I perceived normalization as the times of potbellied and uneducated party members, as the times of depleted comradeship, devoid of the real cooperation and solidarity, as the times when servile mediocrity and submissive stoop ruled over our lives. The past times were the times of dumplings, beer, brass music, and normalized pop-culture. This adolescent aversion to the parental order strangely joined with culturally inherited critique of bureaucracy and mass industrial society in common resistance to the totality of the normal. We found ready-made expressions of such resistance in the anti-utopian books and movies: in Y. Zamyatin's novel *We*, in Orwell's *1984*, in T. Gilliam's movie *Brazil*, or later in H. Arendt's book *Origins of totalitarianism*. Topics of anarchy and resistance to the system of control based on violence and surveillance dominated our political discussions. We listened to punk and hard-core music, visited concerts and demonstrations (such as the blockade of the Temelín Nuclear Plant or the Velká Pardubická Steeplechase), and distributed the anarchist magazine A-kontra.

60 Different Life [online]. Accessible form www.differentlife.cz; Jiné časopisy v Česku [online]. Accessible from www.Bigmag.cz.

Such anti-system mentality was also significantly influenced by the evolving ecological movement. I participated in the movement by translating articles for the Different life magazine: on vivisection, on the exploitation of animals in the scientific and industrial research, or industrial farming. We advocated vegetarianism and sympathised with the animal rights movement. Looking back, I realize that the ecological perspective was important namely for the fact that it pointed out strong resemblances between totalitarian and liberal versions of the modern mass, consumer, and techno-industrial society, similarly as H. Arendt in her *Origins of totalitarianism* found similarities between fascist and communist systems of control. Indeed, all the modern political systems, including the liberal and democratic ones, are involved in the dialectic of modernity, powered by the idea of progress, and the urge to gain control over the very conditions of life by the means of technoscience.

So far, I have attempted to feature some lines, trajectories and situations that run through me and formed me during my juvenile years. The descriptions of different experiential fields and multiple influences, and discrimination between them should be undoubtedly more precise. Yet, I believe that provided description can at least evoke[61] experiences of the transformational period at the end of the twentieth century, experiences of opening up, transformation, falling boundaries, altered rhythms and intensities, experiences of resistance and liberation occurring in the situation of the liminal post-communist abnormality. The question is what effect they had on my personal disposition. The major effect was quite common mood of displacement, loneliness, and absurdity (fed by reading existentialist philosophy – J. P. Sartre, A. Camus, or L. Klíma), flavoured with the experience of disfunctional family, and father's absence. Beside this traumatic set, there was also an ecstatic side: going out with friends, leaving home, going to parties, concerts, and trips. This ecstatic set included, among others, wild dancing, diving into the crowd, punk raving together with drinking alcohol and smoking tobacco, intensive friendships and antipathies, discovery of sexuality and violence, and other typical motives of maturation in our society.

Despite the fact that different psychoactive substances like cannabis, meth, cocaine, heroin, or LSD already circulated in Czech society and some of my peers used them, I did not encounter them then. Neither the early reading of psychonautic literature, of Baudelaire's *Artificial Paradises*, de Quincey's *Confessions of an English Opium Eater*, Burroughs' *Junkie* and

61 For the overview of methods of evocative autoethnography, see Bochener, A., Ellis, C. 2016. Evocative Autoethnography: Writing Lives and Telling stories. New York/London: Routledge.

Naked Lunch, or Burroughs' and Ginsberg's *Yage Letters* inspired my desire to experiment with drugs. There were several reasons to it. First, as I went through the erratic process of establishing conscious self-identity, leaving aside desolate environment of a normalization village, and connecting with a cultured environment of a district town. There was no need for stronger influences to induce the rupture from conventional reality. The alternative community whirling with music and dance, infused with tobacco and alcohol was ecstatic enough. Second, a low self-esteem and little courage did not allow me to do anything dangerous. I used to be an observer rather than a doer, a dreaming idler who did not initiate anything without being inspired by others. Third, nobody had offered drugs to me at that time. Fourth, my indifference towards drugs was a consequence of the successful negative cultural imprinting of the drug concept. I well remember that during my childhood in the seventies and eighties a person nearest to a drug user was called a *hashish man*, a term that occupied the same semantic field with *marias* or *haries*, terms indicating antisocial behaviour. With the proliferation of drug use in the 1990s, other terms came to the fore such as *narco*, *junkie*, *toxikoman*, or *addict*. Despite my underground enthusiasm, I still believed that drugs ~~are~~ essentially bad. They were socially stratified, connected with groups of excluded, non-conformist, anti-social individuals who did not lead respectable, virtuous, well-mannered life of normal citizens. Despite my inclination towards such milieu, drugs remained synonymous to addiction and subjugation, to irresponsibility and the lack of freedom. That was why I interpreted Baudelaire's, de Quincey's, Burroughs', or Ginsberg's drug texts primarily as a warning about their negative effects. I thought that the only effects of drugs were weakening of one's will, addiction, self-deterioration, blurring of the difference between good and evil, and reducing their user to the mindless machines of chemical desire.

Philosophical apprentice

The conflicts that I experienced at high school when dealing with the world and with myself didn't lure me to the path of poisonous substances. Instead, I started to study at the Pedagogical faculty of the University of J. E. Purkyně in Ústí nad Labem, the course called *Essentials of humanities*. I was fortunate to encounter there, amidst the open and liberal character of the Czech university system in the 1990s, several teachers and students who inspired me to take up philosophy at the Faculty of Arts of Charles University in Prague. I became a Prague student of the "the first science," in 1995, when my training in the

philosophical craft/skill and in the discipline of thinking began. My affinity with poetry, anarchy, absurd existentiality and anti-system underground attitudes made me search for an antidote to conflicts and uncertainty. By then I had already learnt that I could find peace in the philosophical search for order and meaning. But soon I realized that the goal of philosophy is not to offer right answers but to cultivate a method ~~and~~. A method that is based on the precedence of questioning, on the craft of concept creation and on the attitude of a distant observer.

Concerning attitude, anyone who starts with philosophy, likewise any decent philosophical workbook, should be able to distinguish between natural and philosophical one. ~~A/the?~~ Natural attitude can be defined as uncontested and unreflected dwelling in the mode of average everydayness. To entertain a philosophical attitude, it is necessary to bring this unreflected and uncontested knowledge of the world under the scrutiny of doubt and inquiry. Yet there is no easy, self-evident way of crossing this boundary; to arrive there, it is necessary to have motivation. According to K. Jaspers, the perpetual motivation that can ignite philosophical thinking lies in ultimate situations.

> *We are always in situations. Situations change, opportunities arise. If they are missed, they never return. I myself can work to change the situation. But there are situations which remain essentially the same even if their momentary aspect changes and their shattering force is obscured: I must die, I must suffer, I must struggle, I am subject to chance, I involve myself inexorably in guilt. We call these fundamental situations of our existence ultimate situations*.[62]

Experiences of ultimate situations aren't as such philosophical. Death, suffering, fight, chance or guilt, on one hand, and birth, pleasure, creativity, meaningfulness and help on the other, form our everyday experience without being necessarily philosophical. Ultimate situations may grant access to philosophy so far as they cause a shock that results in doubt and questioning, while our naïve and natural understanding of ourselves and the world collapses. Ultimate situations may inspire a philosophical attitude in the sense that they motivate thinking about the world in general, as they represent a break in the chains of events that are taken for granted and confront the limits of our situatedness. Philosophical attitude than comprises disconnection with the world (with the

62 Jaspers, K. 1971. Einführung in die Philosophie. Zwölf Radiovorträge. München/Zürich: Piper, p. 18.

unquestioned world of shared certainties, truths, and orders) on the one hand, and the will to unravel the world as a whole, and explain it on rational grounds on the other. Exactly that was the reason why I found philosophical life the most promising and adventurous at same time since it accepts alienation and rootlessness~~/uprooting~~ as its point of departure and opens the life of thinking. Thus philosophical life is the life dedicated to questioning and analysis whose disintegrating influence leaves nothing untouched, and any unquestioned certainty must fade in front of it. The only certainty that a philosophical life offers is the certainty of thinking that subdues life to reason.

Little wonder that such philosophical experience ~~wen~~ hand in hand with my countre-cultural/subcultural attitude and even surpassed it. In thinking, philosophy offers deeper, more articulate experience of freedom then the musical counterculture, the way of life which submits all reality to the tribunal of reason, gives account of it and challenges its solidity with incessant critique. On the other hand, philosophy also offers consolation since it claims to render our experience with the world that is comprehensible as a whole. Thus, philosophy became a kind of new "different life" to me, a life newly split, now between the impossibility of accepting one true interpretation of the world and the idea of understanding the world as such.

Hence, adopting philosophical attitude established the second (alternative culture was the first) critical precondition for my encounter with psychedelics, and influenced it profoundly. In fact, a relatively precise analogy between philosophical and psychedelic experiences can be drawn. Since a psychedelic experience is substantially altered compared to our common waking experience, the philosophical attitude is similarly altered compared to our natural unreflected knowledge. Philosophy, and that is usually the second introductory lesson for a philosophical student, doesn't originate in critical thinking itself, but primarily in astonishment. Astonishment then originates in the encounter with an ultimate situation. It is pre-philosophical in the sense that it precedes any historically random system of interpretation and any particular form of philosophical rationality. It is a kind of experience which philosophy shares with religion, art or science, since it in fact precedes them all. On its deepest level, astonishment is an experience of ecstatic nature of human existence. As human beings we are able to exceed ourselves, go beyond our limited and random subjective worlds and find out that we belong to the transcending whole of reality. In other words, we have the capacity to acquire a distance from our limited experience and from the world as we originally knew it. Such distance allows for creative transformation of the lived world in tools, rituals and symbolic system of signs. The more we put these cultural artefacts between

ourselves and the world as an interface for coping with reality, our distance and our sense of individuality and exclusion becomes more profound.

The experience of astonishment comprises two elements. The first one is a shock that produces amazement as we realize that we are being passively thrown at the mercy of the world. To fully acknowledge this original passivity means to realize the overwhelming power that reality has over me, that nothing of what I am is really mine, that I live a life which was given to me in the world I didn't create. Everything I am made of, including movements of my body, or the forms of my speech and thought, is intertwined within the multiple transcending and encompassing context of contexts. Still, and that is the second element of philosophical astonishment, the shock also produces quite opposite but complementary realization, namely that it is exactly me who is at the mercy of the world, destined to establish myself as a person. The roots of such astonishment lie in the experience of "I can" (or we can), in the experience of an encounter between my powers and the world protruding as an obstacle against me. When I realize that my passivity is not complete, that I am also able and destined to transform and create my own situation, a distance is born. In other words, astonishment reveals ecstatic and eccentric nature of human situation together with its original passivity. We are involved in the world that encompasses us, but it is always distant and detached, and we are always in disagreement with its unreachable presence.

Accepting philosophical attitude meant for me much more than following an educational curriculum. It had completely altered my life strategy, and from the first years of the philosophical studies, I lived according to the philosophical imperative: to question everything, shake everything stable and solid, live in incessant unrest and ambiguity that don't allow for settlement in once attained position. Be protean! It needs to be stressed that such an attitude is not very expedient when it washes over from the realm of knowledge to the sphere of everyday engagement and communication since it tends to disrupt a normal life. Nevertheless, this very attitude, together with other lines in the philosophical stratum of my developing approach, had fundamental influence on my later encounter with psychedelics.

These other lines are related to the content of my philosophical studies. During my studies at "UFAR", the department's curriculum was divided into several sections, called pro-seminars. Every student had to choose a section as his or her major. I chose the pro-seminar called "critique of metaphysics". The key figures of this pro-seminar were our teachers, especially Pavel Kouba, Miroslav Petříček, Karel Thein, or Ladislav Benyovzsky. Thanks to them we became familiar with the continental thought of the second half of the twentieth century – late phenomenology, hermeneutics, existentialism, postmodern theories, and poststruc-

turalism. We gradually penetrated Heidegger's thinking in Being and time, read Merleau-Ponty and late Husserl, Adorno and Lyotard's The Differend, Derrida, Foucault, and Deleuze with Guattari, or Gadamer, together with their nineteenth century predecessors – Kirkegaard, Nietzsche, Marx, and many others. We gained important insights into philosophy on the edge of philosophy, the thinking related to Heidegger's destruction of the history of philosophy, Derrida's deconstruction, or the line of thought that aimed at parting with metaphysics of all kinds, whose goal was to accentuate perception and embodiment, historicity and finality of human situation that cannot be subordinated under the rule of One.

As this type of philosophy had a decisive influence on my thinking, it had also became a cornerstone of this book. At the same time, it remarkably overlapped with my non-philosophical life – with my family situation and my relation to marginal cultural styles. I stopped living at home ~~(maybe give the name of the place here???)~~ and moved to Prague where I studied and worked. As a student, I was still but a visitor at the student's dormitory which I had to leave during summer holidays and find another shelter. I became alienated from my original home in the northern part of the Czech Republic and visited that place only when it was necessary. My Prague domicile was but a temporary asylum full of study, temporary jobs, concerts, and deepening love of movies. I spent the weekends with my future wife's family. The strong connection with underground communities started to fade, partly due to the influence of unrestrained philosophical rationality without wisdom, which turned into tendency to criticize everyone and everything as insufficiently deep, and partly due to the natural course of life disappearing friends, social circles falling apart, and so on. My search for always shifting centre of the life balance continued.

Yet I still draw on the values of independent and underground culture represented by ~~e.g.~~ poetry of the singer, poet and member of Czech dissent P. Zajíček. To understand the context of his work, it is necessary to cite from the preface to the collection of his song lyrics and poems written by M. Machovec:

> Thanks to normalization mass media, Zajiček's poetry became sort of a synonymous to the "antisocialist", or even "antisocial" activities of "the bunch of hoodlums, junkies and troublemakers," that was supposed to form so called underground which was misused in the 1970s as a warning for younger generation to prevent them from meeting similar disruptive elements. Of course, the protest rousing, rebuking and provocatively nihilistic Zajíček's poetry is inacceptable for any kind of consumer. And it had to be especially inacceptable for the collaborationist Czech consumer in the midst of 1970s.[63]

63 Zajíček, P. 1990. DG 307. Texty z let 1973–1980. Praha: Vokno, p. 5.

Such anti-consumerist and anti-normalization ethos represented then for me and for many others the heritage of the Czech underground which had major influence on the forthcoming alternative culture of the 1990s. The need to live a different life from that of our parents afflicted by the ethos of the real socialism and directives such as: *don't draw attention to yourself, live normally as others, conform to the written and unwritten norms and institutions as everybody else*, found its new source in the cultural import that had been funnelling to the Czech Republic from both the West and the East. Unleashed globalization hit us with the full power of its ambiguity. The general Czech society was oriented towards the system of the open market and capitalist production, which initiated the beneficial opening of the shared space, cultural import and dissolution of any kind of boundaries. Simultaneously, the inner conflicts of the rich western society became also apparent and the free west wasn't so unequivocally free as the cheerful atmosphere of the post-revolutionary turn had evoked. Thanks to movies, music and books we started to realize that the difference between the socialist normalization and the totality of the global market is not as sharp, and that both formerly antagonist systems are products of the same process of modernity, as showed by H. Arendt already in the 1950s, especially in the Origins of totalitarianism and *Vita Activa*. The same phenomenon was further discussed by other philosophers and sociologists of the Frankfurt school, e.g. by Heidegger in his meditations on technology, or by French leftist intellectuals in the 1960s and authors of the American psychedelic underground.

I found myself, in terms of the socio-cultural plane, fluctuating between the past and the future. On one hand, there was this grim and rigid past of socialist realism and its concrete greyness, on the other hand, the shiny future of capitalist marketing with its electrifying velocity and electronic chaos reduced everything to an informational source. What started to emerge in front of me was the irreconcilable ambiguity whose contradictions are not caused by this or that political system and cannot be resolved by a universally valid solution. The socialist past was dead and the capitalist future didn't seem charming in the light of the philosophical and countercultural critique, since it offered the "antibiotic" (anti-life) rule of money, techno-science and mass production. But even the culture of "different life", my primary ideological identifier, started to look too one-sided and antagonist, dividing people into those who are and who are not dependent on the system of power. The desire to arrive at unphilosophically definite solutions and the tendency to adopt unquestioned values suddenly seemed too naive and dogmatic.

This kind of insecure existential condition found its unequalled expression in the P. Zajíček's poem *Neither*[64] from ~~the~~ 1978:

Neither sea nor land
Neither light nor darkness
Neither snake nor bird
Neither silence nor shout
Neither vision nor blindness
Neither nothing nor all
Neither numbness nor movement
Neither body nor shadow
Neither fall nor flight
Neither stench nor scent
Neither nor neither

Neither sea nor scent
Neither light nor shadow
Neither numbness nor vision
Neither flight nor silence
Neither darkness nor stench
Neither fall nor bird
Neither blindness nor snake
Neither body nor nothing
Neither movement nor land
Neither all nor shout

On the philosophical level, I ~~have~~ found a rich expression of this kind of mood in the thought of our teachers – P. Kouba, M. Petříček and Z. Kratochvíl. These "Czech followers of Heraclitus" had been showing us the difficult path of thinking that refuses to rest in the ~~piece of~~ definite truth and safety of the citadel of knowledge. It is a type of thinking which claims that the ground of experienced reality is un-ground, definable as "polemos", "non-identity" or "difference". I have described this type of thinking in my master thesis as unstable: "*Unstable thinking could be defined as open thinking which is immanent in time, self-adjusting and transforming, full of randomness and "good mistakes" that uncover so far unconceived possibilities, and operate on more disparate levels without the possibility to be united.*"

64 Zajíček, P. 1990, p. 57.

In this respect, I was inspired by P. Kouba's lectures on the philosophy of politics that emphasise the need to critically evaluate every thinking about politics that attempts to bring action under control of a ready-made programme of the good and just. A political philosophy that launches with the definition of these concepts and derives the ideal organization of society and therefrom the rules of behaviour, disregards the key element of political action that, according to H. Arendt, lies in novelty. This type of thinking even disables action, since it has already been decided by the rule what should and should not be done. This kind of thinking is "moral" in the Nietzschean meaning of the word. It is a thinking based on a hierarchical duality.

Of course, a duality is indeed original and irreducible to one of its poles. Death, for example, is not just negation or absence of life, but it is intertwined with life as its necessary part. Life, as can be experienced and lived, is a slow dying, and death is the engine and the fuel of life. Death as interruption is a transformational event that permits further continuation. All new things grow from dying and killing, and the fibres of unknitted net of one life become a part of other lives. Life processes cannot even unfold without such an original split, and life is a sequence of interruptions and reconnections, discontinuations and new beginnings, connections, bifurcations and reinforcements, impairments and breakups. Non-hierarchical conception of duality thus opens the road to a processual thinking.

Petříček's interpretations of French philosophers, namely of Merleau--Ponty, Derrida, Lyotard and Deleuze led us exactly in this direction. Merleau--Ponty's concept of "chiasm", to which I devoted my bachelor's thesis became crucial to me and it continues to be the fundamental stone of my philosophical approach. Merleau-Ponty characterized chiasma in his late work in the following manner:

> Chiasm – Reversibility: (November 16, 1960)
>
> Reversibility: the finger of the glove that is turned inside out – there is no need of a spectator who would be on each side. It suffices that from one side I see the wrong side of the glove that is applied to the right side, that I touch the one through the other (double "representation" of a point or plane of the field) the chiasm is that: the reversibility – It is through it alone that there is passage from the "For Itself" to the For the Other. – In reality there is neither me nor the other as positive, positive subjectivities. There are two caverns, two opennesses, two stages where something will take place – and which both belong to the same world, to the stage of being. There is not the

> For the Itself and For the Other. They are each the other side of the other. This is why they incorporate one another: projection-introjection—There is that line, that frontier surface at some distance before me, where occurs the veering I-Other Other-I.[65]

To understand duality in this manner, that is, to understand it as non-hierarchical relation means to overcome it (but not to eliminate it), and make a step towards processuality, towards events and becomings. It means to think ~~out~~ of the principle of identity. Identity, the For Itself, becomes a part of the veering process between the two opposite poles: consciousness veers around phenomenon, I around things, I around the Other, passivity around activity, process around state, body around mind, etc. Thinking in terms of identities is replaced with the thinking in terms of relations, lines, configurations, situations, contexts, and networks.

M. Petříček offers a crystalline expression of this kind of thinking in his concepts of mixture and alloy:

> … from a certain perspective, a landscape appears as a tissue, as a structure, as a set of distinct points and relations. But once we start to consider these points as intersections and crossings of relations, we can only see sets of relations, intertwining of relations. At the same moment, points turn into crystallisations, denser or sparser concentration of relations. An 'intertext' that appeared as a structure, suddenly appears as a mixture or alloy with variable density or consistence. What was once identified as a point becomes a wave, intensity, peak of a shade, fulguration or twinkle, 'a core of condensation': a discontinuous structure becomes fluid, produces alloy or mixture which cannot be disassembled into its parts. However, when we happen to glimpse at a core of condensation in the mixture, the process of the mixture structuration begins. Provided that we further examine these cores and discover an intersection inside of them, an intersection which becomes denser and dissolves again so that a change is but a change of shade, the perspective of the alloy returns.[66]

What is the meaning of this philosophical perspective for ~~an~~ interpretation of a psychedelic experience? How did this perspective prepare me for the encounter with hallucinogens? Namely, the experience of a psychedelic state is quite exactly analogous to the afore-mentioned description of a landscape.

65 Merleau-Ponty, M. 1968. The Visible and Invisible. Edited by Claude Lefort. Translation A. Lingis. Evaston: Northwestern University Press, p. 263.

66 Petříček, M. 2000, p. 125.

One's self, things and the entire experienced time-space loses the stable identity of permanent and enclosed entities. The lived world dissolves and melts into a state of a mixture, my experiencing collapses to the level of intertwining, things and events are disposed of their shapes, and I become an intersection, a crossing of relations, a knot in the web of undulating intensities. At the same time, the flow of experience becomes double. A kind of wild *epoché* is under way, I experience my experiencing, and acquire a chance to observe the web of relations I am made of from the impossible empty position. The inner structure of experience is suddenly revealed to itself. In the altered state of consciousness, the experiences from which we are entwined obtain autonomy, and the subject feels as if diving into itself where this "itself" decomposes into its constitutive processes perceived as if happening outside of oneself. The boundary between me and the world washes off or completely disappears.

Therefore, this perspective opens the way for a processual analysis of psychedelic experiences, for the kind of analysis that does not picture experiences as ~~a set~~ of conscious states, but rather as a relational field, as a web of relations, whereas a subject appears as a core of condensation, as an intersection of flowing lines, as something continually constituted in the course of experience.

Socio-cultural context and psychedelic praxis

My set, that is, the life trajectory leading to the encounter with psychedelics is composed of the following lines: growing in an incomplete family without fatherly figure; developing anti-authoritative and hedonistic attitudes; being influenced by the experimental and anarchist modernist poetics; experiencing the double liminality of adolescence and post-communist transformation; tuning in with the rhythms and intensities of underground and countercultural life; accepting the critical philosophical attitude that intensified my alienation from the mainstream society; adopting processual Heraclitean thinking. This set of influences, undoubtedly combined with many others beyond my control, and led to the formation of the specific "condensing core" open to the encounter with psychedelics.

A psychedelic encounter does not affect only the personal level, but also the sociocultural context. Any sociocultural environment regulated by "the consciousness contract", that is, by the rules, habits, and attitudes connected with the borderline experiences. Such contract in post-industrial and information societies differs substantially from the one in tribal or agricultural

societies. The Bwiti cult [67] in the Kongo basin that is known for its ritual use of the psychedelic plant iboga[68], or various versions of the ritual use of ayahuasca in Amazonia, or the religious use of hallucinogenic mushrooms[69] and cactuses[70] in central America are bound to a shamanic type of contract. In the tribal shamanic context, psychedelics are conceptualized as sacraments[71], and usually personified as plant teachers or spirits[72], and interpreted in the frame of animistic worldview. Psychedelic are considered to be magical tools which give a shaman the ability to communicate with dead[73], to commune with plant and animal spirits, and to heal. Thus, the relation to various types of borderline experiences, be it ecstatic trance, psychic disorder or dreaming, tends to be more positive in the premodern, tribal societies. Such experiences are not interpreted as sings of a disease or deviation, but rather as the signs of transcendence, and people deal with them accordingly. The use of psychedelics in a shamanic context is usually ritualized and includes a period of intensive physical and mental preparation for the liminal situation. Psychedelic praxis takes form of a collective endeavour. It includes the teacher – pupil relation, and the content of such experiences is usually shared within a narrow or wider community. The meaning of psychedelic experiences is usually interpreted in religious terms: as a connection to another dimension that is important not only for an intoxicated person but for the whole group to which an adept, or shaman belongs. The whole shamanic context has also an important eco-social

67 Fernandez, J. W. 1982. *Bwiti: An Ethnography of Religious Imagination in Africa*. Princeton/New Yersey: Princeton University Press.

68 Samorini, G. 1995. The Bwiti Religion and Tabernathe Iboga. *Integration*, 5: 105–114; Barabe, P. 1982. La Religion d'Eboga ou le Bwiti des Fanges. *Medicine tropical*, 12 (3): 251–257.

69 Rätsch, C. 2005. The Encyclopedia of Psychoactive Plants. Ethnopharmacology and its Applications. Rochester: Park Street Press, p. 621–626. Metzner, R., Cogg, D. C., 2004/5. Teonanácatl. Sacred Mushrooms of Visions. A sourcebook on the Psilocybin Mushroom. Rochester: Park Street Press.

70 Rätsch, C. 2005, p. 326–341.

71 Merkur, D. 2001. The Psychedelic Sacrament: Manna, Meditation and Mystical Experiences. Rochester: Park Street Press.

72 Heaven, R., Charing, H. G., Amaringo, P. 2006. *Plant Spirit Shamanism: Traditional Techniques for Healing the Soul*. Rochester: Destiny Books.

73 Strong, L. *Psychopomp Stories: Contemplating Death in a Spiritually Diverse Society*. Doctoral dissertation [online] Accessible from www.psychopomps.org.

dimension as premodern societies live in the close connection with their natural environment, and their technological level is low.

The situation in modern and postmodern societies is radically different. Psychedelic are primarily conceptualized as chemical substances, or as drugs. Since the second half of the nineteenth century, when the systematic chemical research started, psychedelics fell within the scope of chemistry and medicine: synthesized by chemists and used by physicians and clinical researchers. Besides being researched in the areas of chemistry, medicine, and psychiatry, psychedelics had also been imported from non-European societies by travellers and anthropologists who encountered them on their journeys. As the result of cooperation between these segments, a specific interpretative and practical context gradually evolved in the West: psychonautics as a scientific, philosophical, literary, and artistic reflection and use of psychedelics. Its peak came in the fifth and sixth decades of the twentieth century during the so called "psychedelic revolution"[74] which not only accelerated the scientific research of these substances, but mainly introduced them to wider population. The intensity of this peak was so high that repressions followed right away, facilitating implementation of lists of officially prohibited substances[75], and strict regulation of their use even for scientific purposes. Prohibition, regulations, and restrictions pushed psychedelics out of the public sphere to the realm of counterculture. Yet, despite such development, diverse types of psychedelic praxis continued to flourish till today, when the development starts to take ~~other~~ course.

The ongoing exclusion of psychedelics in modern societies as well as their continuing inclusion has the same reason, namely the fact that psychedelic experiences disrupt our normal everyday being in the world. They distort our normal experience, disrupt the stable sedimented identity and habitual couplings with the surrounding environment, and consequently create instabilities in the shared social space. Psychedelics are thus tightly related to the ambivalent logic of modernity, to the logic of control and emancipation. On one hand, moderns demand individual freedom and sovereignty, on the other hand, modern societies depend on rational control and management of natural and social

74 Lee, M.A., Schlain, B. 1994. *Acid Dreams. The Complete Social History of LSD: The CIA, The Sixties, and Beyond*. New York: Grove Press.

75 See *Drug and substances under International Control* [online] Accessible from www.who.int/medicine/areas/quality_safety/sub_under_int_control/en; *Single convention on Narcotic Drugs* [online]. Accessible from www.unodc.org/unodc/en/treaties/single-convention.html; *1971 Convention on Psychotropic Substances* [online]. Accessible from www.unodc.org/unodc/en/treaties/psychotropics.html.

resources. The aim of the rational control is to assure social welfare and security by reducing human dependence on natural processes. From the perspective of control and security, psychedelics are classified as prohibited substances with no benefit and considerable risk. But according the same instrumental logic of control, psychedelics had been researched by clinicians, psychiatrist, and military researchers[76], pursuing more sophisticated methods of controlling human mind. The logic of emancipation, on the other hand, opened the way for artist, writers, or philosophers to experiment with psychedelics in completely opposite manner, that is, to expand their minds and liberate themselves from social schemas. First tested by science and art, psychedelics gradually expanded among various subcultures, and finally penetrated mass culture as they appeared in movies, music, or advertisement. They became integral part of our cultural imagination and attracted people who are willing to transcend the boundaries of normal experience. My story of psychedelic encounter may therefore serve as an example of such development, as it is a story of a person that finds happiness in the mixture of knowledge, excitement, and inebriation; a person that is ambivalent, adrift, unable to find its place in the rapidly transforming modern society, a person battling its own demons and insecurities, unable to find its place in sociocultural milieu.

When we compare the context of psychedelic praxis in the modern and pre-modern societies, they seem to be almost contrary. S. Beyer describes pre-modern context as it still exists in the Upper Amazon as follows:

> *But as I learned more and more about the ways in which indigenous people survive – indeed, flourish – in the wilderness, it became increasingly clear to me that the wilderness survival includes a significant spiritual component – the maintenance of right relationship both with human persons and with the other--than-human persons who fill the indigenous world. Thus, I began to explore wilderness spirituality, to learn ways to live in harmony with the natural world, striving, like indigenous people, to be in right relationship with plant and animal spirits of the wilderness. I undertook numerous four-day and four-night solo vision fasts in Death Valley, the Pecos Wilderness, and the Gila Wilderness of New Mexico. I began to work with ayahuasca and other sacred plants in the Upper*

76 Hobbs, J. 2013. *Drop Acid Not Bombs: Psychedelics weapons at Porton Down*. In Cameron, A., Luke, D. Waldstein, A., Sessa, B., King, D. *Breaking Convention. Essays on Psychedelic Consciousness*. London: Strange Attractor Press.

Amazon, peyote in ceremonies of the Native American Church, and huachuma in Andean mesa rituals.[77]

The pre-modern context of psychedelic praxis is the one of coexistence with the nurturing and determining ecological environment where the direct communication with non-human elements is the matter of survival. To use psychedelics means to interconnect with powers of life. Psychedelics are ingested to facilitate knowledge and integrate humans to the community of the living. They can be also used as weapons, that is, as the tools of power and control, but still in the context of reliance and community. In general, psychedelics are not considered to be mere tools, but autonomous entities, teachers and guides who must be treated with respect and whose help must be earned.

In modern societies, these substances are primarily conceptualised as drugs and synthetic substances devoid of their original eco-social context, and transformed into goods. They exist in the context of a complex psychedelic praxis, which includes scientific experimentation, prohibition, clinical and therapeutic use, group recreational use, the wild individual experimentation, and illicit trade. The use of psychedelics is mostly instrumental and takes place at the outskirts of public sphere: in scientific laboratories, academic research, psychiatric or psychotherapeutics settings, or in recreational contexts – within musical subcultures (rave, psytrance, tekno, and many others), in clubs, or at private parties. Both types of environment can be considered borderline since in laboratories as well as at parties, the norms, mechanisms, and institutions of established social order are tested, broken, verified and made a new. These environments hence somehow exceed the domain of everyday life (offices, factories, schools, etc.).

The ~~shock~~ of everyday life

My personal history, social insecurity and philosophical attitude drove me unmistakably among the people with high affinity for drug experimentation. Although drugs, including psychedelics, circulate in Czech society quite freely from the 1990s, to begin using them is far from obvious. Apart from the sociocultural and personal preconditions, a new user also needs others who can provide access to the mostly illegal substances. Before I met the significant others, who had already been connected to the trajectory of drugs, I bid a tem-

77 Beyer, S. 2009. Singing to the Plants. A Guide to Mestizo Shamanism in the Upper Amazon. Albuguerque: New Mexiko University Press, p. xiii.

poral farewell to philosophy. After acquiring master's degree in philosophy in 2002, and unsuccessful application to doctoral studies, I assumed that the philosophical path was not intended to me. I therefore left Prague and moved to Česká Lípa, a small town in the northern part of Czech Republic, where I became a teacher at the local grammar school, and soon also a father.

Getting a new job and acquiring a new social status was part of the metamorphosis from a philosophy student into a small-town teacher, and included a strong impact of everydayness. Everydayness is surely a debatable concept, yet, it is still indispensable for many discussions in philosophy[78], sociology[79], anthropology[80], history, psychology, or political science. Moreover, the term is rather useful in deciphering psychedelic experiences, because there is probably no better way how to conceive of them than to show how they disrupt an ordinary experience. Yet, I do not interpret everydayness negatively, as could certain reading of the following passage from Heidegger's *Being and Time* suggest:

> *Idle talk, curiosity, and ambiguity characterize the way in which, in everyday manner, Da-sein is its 'there' – the disclosedness of Being-in-the-world. As definite existential characteristics, these are not present-at-hand in Da-sei, but help to make up its Being. In these, and in the way they are interconnected in their Being, there is revealed a basic kind of the Being which belongs to everydayness; which we call this the "falling"of Dasein.*
>
> *This term, which does not express any negative evaluation, but is used to signify that Dasein is proximally and for the most part alongside the 'world' of its concern. This 'absorption in…' has mostly the character of Being-lost in the publicness of the "they". Dasein has, in the first instance, fallen away from itself and fallen as an authentic potentiality of Being its Self, and has fallen into to the world. Fallenness into the world means absorption in Being-with-one-another, in sof far as the letter is guided by idle talk, curiosity, and ambiguity.*[81]

78 Phenomenology of E. Husserl (concept of the natural world and natural attitude), M. Heidegger (alltäglichkeit), or B. Waldenfels.

79 Phenomenological sociology of A. Schutz or sociology of G. Simmel. See Sztompka, P. 2008. *The Focus on everyday life: A new turn in sociology*. Academia Europena, 16 (1); Kalekin-Fishman, D. 2013. *Sociology of everyday life*. Current Sociology, 61 (5–6): 714–732.

80 Inglis, D. 2005. *Culture and everyday life*. London/New York: Routledge; Chaney, D. 2002. *Cultural change and Everyday Life.* New York: Palgrave; Collective. 2009. *The Anthropology of Everyday Life*. The 39th Congress of the International Institute of Sociology; etc.

81 Heidegger, M. 1962. *Being and Time*. Translated by Macquarrie, J., Robinson, E. Oxford/Cambridge: Blackwell Publishers Ltd, p. 219–220

Everydayness, in my view, is nothing like falling away from an authentic self, neither it entails entanglement or falling prey to the public. If there are some typical features of everydayness, then it is the repetition of identical actions, and in this sense, everydayness does not mean being lost but being found. Within everydayness, one is certain about what to do, where to go, when is the time for what, one knows what is beneficial and what is harmful. We are undoubtedly absorbed by the world in a way, but it does not mean being lost and dispersed, but rather to be together with the world that concerns ~~me.~~ It means being able to respond to requirements of everyday life, being able to cope with necessary things like eating, sleeping, working, or meeting others; being able to manage what needs to be managed. The social dimension of everydayness does not inevitably mean impersonality and anonymity, but rather dependence. As social beings, we are always together with others, namely with those on whom we depend a who depend on us. Our lives are intertwined with the lives of other people in relations that form intricate fabric of various social networks. Everydayness has also a cultural dimension consisting of typical cultural features determining culture's identity which are generated by repetition of common practices, by preservation of common institutions and rituals, by the learned and transmitted ways of caring about the same necessities, or by the common language.

Everydayness has also its ecological dimension. The basic structures of repetition, basic rhythms of our lives are biological, they relate to life processes and thus to metabolism. The scope of our metabolic ways is determined by the landscape. A grassy mountain steppe offers different ways of sustenance and creates different rhythms of life preservation than an industrial agricultural landscape, a rain forest, or a city. But the key element is always interdependence of different organisms, which can be transformed and severed by human technologies, but never outdone. From the ecological perspective, everydayness comprises a stratified territory, a field of relations ~~whose~~ determined by functional loops: what works together with what. Any territory consists of repeating trajectories which connect distinct places. Territories are typically structured by roads which connect locations, be it animal pathways, human footpaths, or highways. We are already born to a landscape occupied by paths and roads as habitual lines of movement, transfer of information and energy. Repeating, habitual lines of movement and dwelling give a territory its typical, everyday character. A. Schutz explains it in the case of social space as follows:

> *Thus, the social world into which man is born and within which he has to find his bearings is experienced by him as a tight knit web of social relationships, of systems of signs and symbols with their particular meaning structure, of institutionalized*

> *forms of social organization, of systems of status and prestige, etc. The meaning of all these elements of the social world in all its diversity and stratification, as well as the pattern of its texture itself, is by those living within it just taken for granted*.[82]

To say that our entanglement in social webs is "taken for granted" means that we are only partly aware of it. Taken for granted is for Schutz a pre-predicative understanding, non-verbal, but foundational for the predicative one. Taken for granted means that our lives unfold within a tight knit web, within a system of relations that encompasses us as a multileveled, intertwined dynamism of meaning, and enables our explicit knowledge. The structure and dynamism of such networks, its divisions and stratifications are built upon the repetition of similar processes, upon the maintenance of sum of relations, upon following the same lines of movement.

The impact of everydayness that I went through between the 2002–2008 can be explained as an intertwining of three basic lines: the line of everyday live with its demands; my personal trajectory; and the trajectory of psychoactive substances. The decisive events of this period, building a new family and teaching at the local grammar school, started my transformation from the fallen adept of philosophy into a father, a husband, and a teacher. The base line of the entire process was the conflict between individual and the social system as referred by G. Simmel already in 1903:

> *The deepest problems of modern life flow from the attempt of the individual to maintain the independence and individuality of his existence against the sovereign powers of society, against the weight of the historical heritage and the external culture and technique of life. This antagonism represents the most modern form of the conflict which primitive man must carry on with nature for his own bodily existence*.[83]

The impact of everydayness is thus a consequence of a clash with the sovereignty of subjugating external forces, namely with the necessary reciprocal dependence on others and related overwhelming power of the world as such. It consists in the clash of the personal trajectory with the streams, lines and directions that already stratify the shared world and constitute one's possibilities. Simmel's antagonistic view is here but a heuristic point of departure. It

82 Schutz, A. 1976. *Collected Papers II. Studies in Social Theory*. Hague: Martinus Nijhoff, p. 230.

83 Simmel, G. 1903/1971. *The Metropolis and Mental Life*. In Levine, E., ed. *Simmel. On Individuality and social forms*. Chicago: Chicago University Press, p. 324.

presents well comprehensible duality of contradictory forces, which, according to Simmel, results in the "*resistance of the individual to being levelled, swallowed up in the social-technological mechanism*"[84]. On the one hand, there is the swallowing force of the external system of power and the deadly necessities of nature, on the other hand the individual's fight for freedom and survival. But this relationship is not necessarily only antagonistic and negative. It has also a positive side since the pressure exercised by the environment against every living system who is in constant danger of being swallowed by it, awakens its ability of coping with life and exercising appropriate counter-pressure.

Such interplay of contradictory individual and social elements represents one of the basic conflicts of modernity as an epoch. It is a conflict between complementary demands for emancipation and control. The emancipatory demand requires liberation from all forms of domination, including the domination of necessity (the Faustian motive), and as this demand is firmly inscribed into the project of modernity[85], we can talk about freedom as a non-ground of modernity[86]. The main tool to achieve emancipation in modern society, and to establish community of free and independent individuals with equal rights and obligations became the scientific and technological progress that led to the emergence of the techno-sphere, the global industrial system of management and control of inhabited landscapes conceived as collections of sources. The full emancipation requires command of the conditions of life itself, it requires abundance. Such abundance was achieved thanks to the system of mathematical knowledge, the industrial system of production and the bureaucratic system of control. To put these systems to work requires stratification of the whole social space whose inhabitants must undergo complicated process of acculturation to become functional units in the machinery of the modern state. The everydayness in modern societies has just this structure.

Yet, from the side of practical everyday existence, such theoretical perspective might prove quite disadvantageous. Entering social space while demanding anarchic freedom and taking social relations and institutions as the system of control led in my case to intensification of inner and outer conflicts and social isolation. I perceived the family life with its regular rhythms of caring, obliga-

84 Ibid.

85 Bauman, Z. 2006. *Úvahy o postmoderní době*. Praha: SLON, p. 12–13.

86 Heller, A. 2005. The Three logics of Modernity and the Double Bind of Modern Imagination. *Thesis Eleven: ciritical theory and historical sociology*, 82(1): 63–79; Cassegard, C. 2004. Fear, desire and the ideal authenticity: antinomies of modernity in the works of Abe Kôbô and Martin Heidegger. *Africa & Asia*, 5: 3–24.

tion and responsibility for others as unbearably restrictive and revolted against it. I had approached the school system whose part I became in the same manner. I found it obsolete, prisonlike, governed by technocratic rules. I perceived it as a system of dictations, testing, and exams, system of competition for the highest degree. I dreamed of de-schooling[87], studied critical pedagogy[88], and tried to find alternative ways of education. But the lack of teaching experience and personal integrity did not allow me to achieve any progress in this direction. Anyway, family and occupation required integration of my personal trajectory into the non-philosophical, non-poetic and mainstream sociocultural milieu. The complex stratification of the already occupied social space forced me to establish a new lifestyle. Thus, becoming-father and becoming-teacher took place under the conditions of conflict and transformation, under the impact of everydayness as a conflict between the personal capabilities and the forces and possibilities of the shared social world.

On the personal level of this process I was challenged to take up responsibility. As a father, a husband, and a teacher, you are not responsible just to yourself and your own conscience. You simply cannot continue to totter on the edges of the social realm, dwell in temporary autonomous zones, refuse stable identity, and just observe life from the critical distance. You must be here by the things and beings about which you need to take care. To hold up and prosper, you need to acquire identity that is definite, stabile and understandable to others. You need to assume your responsibilities and gather authority to be able to decide and act since others depend on you. This challenge made me to get sober, to lose ungrounded illusions about myself and the world. So, deprived of the supporting academic environment, of the anonymity and opportunities in the city, and of the libertarian environment of alternative culture, I had to step back into the mainstream society. In philosophical terms, it was the return to the cave, a transition from nomadic existence of a student, an occasional writer, and a person with no stable job into the strictly delineated existence of a small-town teacher. Gradually, I realized that to uphold ~~your~~ own ideas and life strategies within the repeating cycles of everyday life in modern society, where one obligations follows another in an unending chain of things that need

87 Illich, I. 1971. *Deschooling society*. London: Harper & Row.

88 Giroux, H. A., Giroux, S. S. 2006. Challenging Neoliberalism's New World Order: The Promise of Critical Pedagogy. *Cultural Studies – Critical Methodologies*, 6 (1): 21–32; Kincheloe, J. L. 2008. *Knowledge and Critical Pedagogy. An Introduction*. Dordrecht: Springer.

to be done, requires not only certain candour, but mainly a strong personality of a complete man which I was lacking.

On the social level, I experienced the change of social status. Becoming--father of nuclear family includes, besides developing new personal traits and strategies, connecting to wider social and institutional network. As a middle--class citizen, one must get his personal bank account, a new ID card, change his or her place of residence, acquire a flat or house, get a loan, buy a car, get an insurance, register at the local physician and dentist, become legally responsible for children, etc. Becoming-teacher also means becoming a paid part of the state institution, and a representative of the state educational system which, by the way, completely changes your social visibility. Pupils, their parents, and colleagues know you and greet you in public, so you are becoming a public person who is supposed to fulfil preestablished demands and expectations since you exert actual control over others. The teacher's place is thus not empty, it is already occupied, it is a knot in the web of relations already formed by the norms, laws, customs, and expectations. It is a forming place, situation that is already laid out and transforms the one who enters it. And if one is unable to comply with it, one can be excluded.

Community of night and the way of poisons

Provided that I experienced the impact of everydayness primarily as a conflict with preestablished norms, and my natural reaction was to escape to an environment that offers at least partial autonomy. The environment of the night life, of pubs, bars, clubs, concerts, and free parties fulfilled such function. Thanks to my sympathy for cannabis that started during my Prague years, culturally inhibited inclination to alcohol, and lucky encounters with certain people, I quickly got into subcultural circles in Česká Lípa. There I met a wild bunch od different people listening to reggae, hip-hop, rock, metal, and rave music; a bunch of creative, thinking and seeking people of different professions and inclinations: musicians, IT technicians, artists, glassmakers, local literary authors, but also a bunch of local lunatics, weirdos, drunkards, drug addicts and criminals. In such environment, I connected to the trajectory of psychedelics.

The community of night is situated on the outskirts of the normal working day, and it is a domain of entertainment and recreation, including recreational use of drugs. The space of the night bathes in the rivers of alcohol and is shrouded by clouds od tobacco and cannabis smoke. It is an environment where one can easily get across the limits of law, where the mentality of the

working day, controlled by the circuits of family and workplace, is temporarily suspended. It is a time-space devoted to the uncontrolled flow of desires, a chaotic domain of hidden lives lusting after inebriation and relaxation where people of similar inclinations meet. It consists of people who cannot to find a balanced, unconflicted way of life, whose personal trajectories are often fragmented and twisted by diverse types of conflicts and traumas, who are incapable of finding a harmonious relation with others. They are often excluded from the mainstream social life, entangled in unsatisfactory and harmful relationships, or come from broken families. They are unhappy at home and stressed at work. They fumble and seek, mostly without a proper direction, they stagger and are pulled down by the stream of life, unsatisfied and unfulfilled. Or, they don't seek anything anymore, already gave up, because they are stuck, revolve in vicious circles unable to accept or refuse their rhythms. They oscillate between yes and no, always beginning and always stopping – to smoke, to drink, to be in a relation, etc. They have a problem with self-discipline and self-control, accepting limits is difficult for them since they are unwilling to comply with preestablished social patterns and usually unable to create new ones. But some of them are open, adventurous, willing to risk, creative and full of ideas, always trying to find something unusual and surprising. They are ambiguously childish, immature, and unorganised on one hand, and playful and unbound on the other. One can also meet borderline personalities within the night space, those who fell through the filters of social stratification, who find out that all the places are already occupied: members of the dark underground permeated with poverty, violence, destructive addictions, and psychic illnesses.

It is important here that the community of night creates environments highly tolerant to drugs, since it is a hedonist aggregation of those who seek disruption, intoxication, and release, but also inspiration, non-stratified and non-hierarchical closeness with others (we are all equal in the pub). The range of substances which flow through these environments is quite wide. This fact is undoubtedly related with the information, market-like and globalised nature of contemporary societies that allows for fast exchange of commodities and information, including such popular goods as drugs. So, it is possible even in the small-town bar to obtain many different psychotropic substances: from tranquilisers up to datura seeds. Many recent addictology studies state that most cases of inappropriate drug use are related to the "polydrug use"[89]. From

89 Leri, F., Bruneau, J., Stewart, J. 2003. Understanding Polydrug use: review of heroin and cocaine co-use. *Addiction* 98 (1): 7–22; Boys, A. L. S., Norcross, K. 1997. Polydrug use at raves by a Western Australia Sample. *Drug and Alcohol Review*, 16 (3): 227–234 ; Collins, R. L., Ellicskson, P. L., Bell, R. M. 1998. Simultaneous

this perspective, the space of the night is also the space of many drugs within which trajectories of various substances intertwine with the trajectories of the above described range of people.

The ruling and the most influential substances in this respect are tobacco and alcohol. Namely the industrial cigarette tobacco whose production involves the use of hundreds of "*additives and ingredients with chemosensory effects that promote addiction by acting synergistically with nicotine, increasing product appeal, easing smoking initiation, discouraging cessation or promoting relapse…*"[90]. This process turns cigarettes from tobacco into a chemical cocktails produced with the goal to chain up and control, to cause addiction. The nicotine addiction can be, from the pharmacological perspective "*understood to be a complex process that is primarily caused by the pharmacological effects of nicotine which activate nicotinic acetylcholine receptors in the brain leading to release of the neurotransmitter dopamine into the mesolimbic area, corpus striatum and frontal cortex*"[91]. The dopamine is an alkaloid from the group of phenethylamines, it is a neurotransmitter circling in the brain within the dopaminergic system responsible for the control of the brain reward pathways. "*To put is simply, activation of these pathways tells a person to repeat what he has just done, in order to obtain the desired reward*"[92].

The nicotine addiction, and the same applies to all other drugs, is never purely chemical, simply physiological, but always psychochemical, necessarily related to the pharmacological action and to the typically ambiguous feeling of pleasure. Smoking offers relaxation and calm, it relates to resting and cessation of activity, but it also induces excited concentration and directs one's attention to the present moment. Regarding tobacco, Dale Pendell states in his poetic--alchemical masterpiece *Pharmacopoeia* following:

> *All the treachery of our beloved poisons is evident in this plant. It is a stimulant, a tranquilizer, a narcotic, and, if we are to believe the ethnobotanical reports, a hallucinogen. It is also the most toxic plant regularly used by human beings. Tobacco is a model of ambiguity: healer and killer, ally and seducer… Tobacco is*

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polydrug use among teens: prevalence and predictors. *Journal of Substance Abuse*, 10 (3): 233–253.

90 Hillel, R. A., Israel, T. A. Connolly, G. N. 2015. A study of pyrazines in cigarettes and how additives might be used to enhance tobacco addiction. [online] Accessible from tobaccocontrol.bmj.com/content/early/2015/05/03/tobaccocontrol-2014-051943.full.

91 Ibid.

92 Höschl, C. 1996. Syndrom narušené závislosti na odměně. Vesmír, 75 (9).

> *the primary shamanic plant of the New World. Within this plant are prototypes of all the lessons of the Poison Path. You could learn them all from this one plant… if it didn't kill you first.*[93]

The mixture that is smoked as cigarette tobacco is certainly not a natural plant product but literally a "designer drug"[94], a chemical cocktail made in laboratories by chemical engineers, tightly related to economic and power interests of its producers. Moreover, it is usually used inappropriately in a mindless and neurotic manner of the compulsive chain smoking. Nevertheless, the basic ambivalence of nicotine experience determines the night space as the space of the double desire, the desire for calm and relaxation on the one hand, and the desire for excitement, stimulation, and concentration on the other. Also, the social side of smoking is important: borrowing cigarettes, automatic and non-problematic closeness when asking for the light, associating force of the common habit which allows strangers to start a conversation.

The path of alcohol, tobacco's co-regent, is similar. From the pharmacological perspective, the activity of ethanol is essentially bound~~ed~~ to the GABA[95] and NMDA[96] receptors in the brain. Alcohol induces jolly excitation, carelessness, ~~lost~~ of scruples. It breaks the limits of the wake sobriety and leads to an alcoholic excesses which is closely related to the release of unconscious conflicts, desires and needs. At the same time, alcohol's action is anaesthetic, intoxicating by it leads to unconsciousness, and takes one to the realm of forgetting. When Pendell characterizes alcohol as an inebriant, he states:

> *So initially the inebriants are the rebel's ally: an insurrection in heaven and a return to the blood. A return to "just do it." A return to what you desire, to beyond what you have been told you want, to what you really want. To do it. Yourself. Now. Leap, leap. License. Sobriety diminishes, discriminates, and says no; drunkenness expands, unites, and says yes. It is in fact the great exciter of the YES function in man. (William James, The Varieties of Religious*

93 Pendell, D. 1995. Pharmako Poeia. Plant Powers, Poisons and Herbcraft. San Francisco: Mercury House, p. 31–32.

94 Caroll, F. I., Lewin, A. H., Mascarella, S. W., Seltzman, H. H. 2011. Designer drugs. A medicinal chemistry perspectives. Annals of the New York Academy of Sciences, 1248 (1): 18–38.

95 Chebib, M., Johnston, G. A. R. 1999. The 'ABC' of GABA receptors: A Brief Review. Clinical and Experimental Pharmacology and Physiology, 26 (11): 937–940.

96 Hoffman, P. L., Rabe, C. S., Grant, K. A., Valverius, P., Hudspith, M., Tabakoff, B. 1990. Ethanol and the NMDA receptor. Alcohol 7 (3): 119–231.

> *Experience). All inebriants are solvents and general anaesthetics. They all lead to unconsciousness. But each inebriant has its own agenda as to who goes to bed first. With alcohol the superego is the first to go. Dizziness and passing out relate to inebriation, and such inebriation is usually our first glimpse into the liquid, slippery quality of consciousness. We spin around until we fall. We clutch the ground, now itself spinning, and spin around with it: the earth spinning, the horizon heaving, and the sky rocking all together.*[97]

Alcohol as an activator of the GABA and NMDA receptors[98] influences two systems of neurotransmission, the inhibitory GABA system and the excitatory NMDA system. Inhibitory neurotransmission leads to the calming of the brain, the excitatory one stimulates its activity. The fact that alcohol acts in both directions supports my interpretation of the double nature of desire that structures and occupies the night space. Inhibition relates to relaxation from stress and worries, from the unpleasant pressure of necessity. Excitation relates to the need for excitement, to letting go off the internalized system of norms and control (superego). The deliriant drunkenness which ends in nausea, loss of motor coordination and finally unconsciousness can be interpreted as the mutual counter-action of inhibition and excitation.

In the environment where I encountered drugs, the double rule of tobacco and alcohol is extended into the triumvirate of tobacco, alcohol, and cannabis. It is well known that the post-1989 Czech society became one of the Europe's cannabis super powers, and the cannabis smoking, usually mixed with tobacco, quickly became massively popular. The cannabis pharmacological action[99] is far too complex to be reduced to a simple model like tobacco and alcohol. Nevertheless, I will make such an attempt, since my aim is not the exact pharmacological analysis, but rather finding an analogy between bodily and cognitive processes, between substance's action within a body and its manifestation in experience.

Pharmacological action of cannabis depends on the endocannabinoid system, the production and action of endogenous cannabinoids. It is a "*family*

97 Pendell, D. 1995, p. 51–52.

98 Paul, S. M. 2006. Alcohol sensitive GABA receptors and alcohol antagonists. *Proceedings of the National Academy of Sciences of the USA*, 103 (22)_ 8307–8308; Davies, M. 2003. The Role of GABA receptors in mediating the effects of alcohol in the central nervous system. *Journal of Psychiatry and Neuroscience*, 28 (4): 263–274.

99 Agurell, S., Dewey, W. L., Willette, R. E. 2012. The Cannabinoids: Chemical, Pharmacological and Therapeutic Aspects. Orlando: Academic Press.

of molecules present in the brain and other tissues – not just in humans, but all over the animal kingdom. Quite independent from the cannabis plant, these native molecules borrow from its name nonetheless… and are an integral part of our regular physiological processes. It is far more accurate to say that within the cannabis plant's ancestral lineage, compounds evolved that are remarkable biochemical mimics of our own endocannabinoids. In actuality, the eCB appeared much earlier in evolutionary history than did the cannabis plant, as indicated by their presence in so many diverse and early life forms, including even rudimentary marine organisms".[100]

The claim that endocannabinoids are older than actual cannabinoids produced by cannabis plants strikes as surprising, but to thinks this claim through properly would leads us too far away. A complete pharmacological analysis of cannabinoid action would require more space, if one would like to consider recent research which states, the "*the endocannabinoid system virtually influences every physiological process in human body*"[101]. Therefore, I will reduce my attention to its action in the brain, and its relation to cognitive processes and phenomenal experience.

German and Schechter conclude that cannabinoids are agonists of endocannabinoid receptors which means that they "*bind with molecular receptors coding and activating our genes, and thus artificially, without the inherent need, activate the whole eCB system by substituting its endogenous production. The function of the eCB system is described followingly: a given neuron releases eCBs in order to continuously regulate and tune its own synaptic inputs. Such a process, whereby the synaptic connections between neurons are malleably weakened or strengthened, is referred to as synaptic plasticity—a mechanism by which learning and memory occurs at the cellular level. The feedback mechanism of eCB-mediated synaptic plasticity is important not just for computational processes (how we think and feel and learn), but as a matter of cellular survival. Too much excitement can be deadly to the cells of the brain. An apparent and major function of eCBs—and therefore a significant effect of the cannabinoids found in cannabis—is neuroprotection, protecting the brain cells from too much excitation. A key action of eCB release in the brain, therefore, is a cellular protectionism, countering the ravages of neuronal excitotoxicity*".[102]

100 Gerderman, G. L., Schechter, J. B. 2010. Chapter 6: The Endocannabinoid System. In Holland, J. et Al. The Pot Book. A Complete Guide to Cannabis. Its Role in Medicine, Politics, Science, and Culture. Rochester: Park Street Press (ebook).

101 Ibid.

102 Ibid.

Thus, eCBs essentially regulate the frequency of neuron signalling. Their primary function is "*to dampen patterns of electrical communication*", whereas "*in some neural circuits, the eCBs are used in an opposite way, to release the neuron from inhibitory input, allowing it to fire its electrical signal at a less--restrained frequency*"[103]. It follows from this that "*depending, therefore, on the precise cellular distribution of CB1 receptors in a given brain region, eCBs might either inhibit neuronal activity, by slowing down excitatory synapses onto that neuron, or disinhibit (excite) neuronal activity by slowing down inhibitory synapses*".[104] The cannabinoid's action floods all the cells of a particular brain circuit, and depending on the ratio between the main cannabinoids, the effect is more inhibitory, or more excitatory.

Again, we encounter the ambiguity which is, according to Pendell, typical for all poisons. Inhibitory as well as excitatory cannabinoid action manifests in the experience of cannabis intoxication all at once but one aspect may be stronger than the other. The phenomenal spectrum of cannabis experiences thus ranges between a clouded unconsciousness and extended enlightened super--consciousness escalating in pseudo-hallucinatory visions. A typical cannabis experience may be described as a slowdown. Speaking becomes quiet and slows down, overall calming down effect and relaxation appears, one is flooded with pleasant feelings, does not want to move or do anything at all. One remains at a place, switched off, disconnected from the normal hustle of life, time experience is delated so that every moment seems much longer and intensive. Time is prolonged, and space spreads out before you, filled with unexpected meaning. This part of the process may lead up to a catatonic state of an unbeatable nauseous swoon. This inhibitory phase is usually counteracted by the excitatory one. Your speaking and thinking abilities improve, you become much faster and smoother, everything makes good sense and falls in its place, you are intuitively tuned to your surroundings. This phase is followed by an euphoric states of joy, jolly, and sensuous bliss, and accompanied by clarity and insight. Surrounding environment, people, things, and events overflow with meaning, intensity of detail perception is high, you can dive into the depths of a present moment. You also strongly empathise with others as if your minds are interconnected. With this, you lose certainty about the distinction between inside and outside, and if the intoxication is strong enough, you may be puzzled about what did you say and what was said by someone else, what happened earlier and later

103 Ibid.

104 Ibid.

while forgetting what happened right now, instantly diving into the depths of another moment.

Thus, the lines of at least three different substances permeate ~~you when you become~~ an active participant of the night life: tobacco, alcohol, and cannabis. These three are accompanied by the lines of other, less widespread, yet still rather popular substances. Personally, I encountered several of them; The Czech version of Xanax called Neurol, a drug from the family of benzodiazepines, classified as anxiolytic and hypnotic substance, a legal drug that inhibits anxiety feeling, dampens pain, lowers the threshold of sensitivity, clouds awareness, and may induce sleep, or still very popular ecstasy, the famous erotic and dance drug, classified sometimes as a psychedelic, or rather as the main representative of so called empathogens or entactogens[105]. Ecstasy experience may be in short described as inducing "*empathy, acceptance, closeness, insight, loss of defensive attitude, calm, unity*"[106]. The non-addictive MDMA which is an amphetamine derivative meets in the streams of the night life with its more aggressive a strongly addictive relative, methamphetamine, whose familiar name is gingerbread. The positive, rewarding meth experience may be describes as follows:

> *I was very much awake. I felt stimulated, but not nervous. I was very self-confident, ready to cope with anyone, anything, anywhere. The self-confidence was even higher than on cocaine. I was Mr. Marvellous, and whatever I did was absolutely right… The sound of music was unbelievably fresh. To compare it with my previous experiences, it is best to describe it as a combination of an opiate and a stimulating speedball. I was relaxed, euphoric a full of energy. I couldn't imagine how I could feel better, I was convinced that I can do anything… It was like all the social limits of normal life were suspended, and Mr. Marvellous was in control. I was saying the right things in the right time, and I was enjoying myself. I spent the night on it and it was absolutely terrific. I completely understand why people use it.*[107]

105 Adamson, S., ed. 1986. Through the Gateway of the Heart: Accounts of experiences with MDMA and other Empathogenic Substances. San Francisco: Four Trees Publications; Nichols, D., Yensen, R., Metzner, R. 1993. The Great Entactogen – Empatogen Debate. MAPS Bulletin, 4 (2): 47–49.

106 Bravo, G. L. 2011. What does MDMA feel like? In Holland, J., ed. 2011. Ecstasy: The Complete Guide. Rochester: Park Street Press, p. 21

107 Stimulated, Vindicated, 2008, Meet Mr. Cool: An Experience with Metamphetamine. [online] Erowid.org. Accessible from erowid.org/experiences/exp.php?ID=48576.

It is necessary to add that this manic phase of meth experience is redeemed with physical and mental exhaustion which arrives afterwards, with very painful fade away phase that may include hallucinatory delusions, paranoia, strong addiction, and other negative effects.

Besides methamphetamine which I never used because I was scared, I was offered cocaine which is too expensive and so it is rather a drug designated for wealthier big city clientele. Although cocaine is present, the psychochemical mixture of the Česká Lípa night space comprises much cheaper, sometimes even free of charge substances, namely LSD and psilocybin mushrooms, exceptionally ketamine. Once, for example, I took part in a remarkable pub session when two "wild mushroom men" appeared and handed out quite many mushrooms so that ten to fifteen people got intoxicated and spent the night in a mellow psilocybin high.

Entertainment and free time

The drug life in night bars, clubs, parties, and concerts forms a specific and autonomous sociocultural space with its own rules and dynamics. Yet, if we consider the wider picture, even this half-autonomous space must be seen as a part of the shared post-industrial, consumer and information society we all live in, and so it is subjected to the same forces and principles. The nigh life is propelled by the same motor as the daily existence of the state, work, and family where we are firmly embedded in the flow of goods and information and have no choice but to consume them. Authors of the book *Youth, Drugs and Nightlife* explain it as follows:

> *Young people are viewed as attempting to find self-fulfilment and ways of identifying with other young people through the consumption of goods, especially fashion and music. Given this perspective, we locate youthful drug use both within the social context of the dance scene and as an important aspect of consumption, which, like the consumption of other commodities, is used to construct an identity. Drugs – along with fashion, musical tastes, and general lifestyles – are important symbols through which young people construct their identities. The different ways in which young people use different commodities leads to new and different hybrid forms of identity*.[108]

108 Hunt, G., Moloney, M., Evans, K. 2010. *Youth, Drugs and Nightlife*. London/New York: Routledge, p. 2–3.

A drug use, namely the so called "recreational use", within the nightlife environment belongs to the general context which may be delineated as follows: "*In nightlife settings, most people who consume psychoactive substances do so with the intention of having fun*"[109]. The context of "fun", meaning entertainment and recreation, is the primary context for encountering mind altering substances in contemporary welfare societies. A rapid growth of entertainment and tourist industries is typical for post-industrial societies since the second half of the twentieth century. And the commodity that is valued above all in these industrial sectors is the free time: the time of weekends and vacations when it is permitted not to work, take rest, and become a sovereign of one's own time. The space for entertainment and leisure emerges in societies whose members can afford to work only several hours a day and have the rest of the day and of the week free. In the liberal economic setting orientated towards pursuit of personal happiness on one hand, and the free trade on the other, the free time becomes invaluable commodity. It is a precious commodity which we learn to desire since childhood. Children in nursery schools learn it when they don't have to walk in pairs and follow teacher's order and have a break, are free to move and play as they wish. Elementary and high school students crave it when waiting for a break or for holidays. Adults cherish it at work, when they can have a break for a coffee and cigarette, when they have a free weekend, or go for vacation. This time is so special for most of us that we want to enjoy it the best conceivable way, we want to possess it, we want to have a good time. And often, we want to experience things we haven't done before, something that transcends common activities of normal day.

The stream of the nightlife is therefore a part of the overall social structure, a part of the free time domain. The way we spend our free time defines us to the same extent as our job or school. The free time is a stabile part of our normal everydayness whose basic rhythm consists in oscillation between these two time zones of our lives. The *heavy* time of the working day in offices, bureaus, factories, schools and all the regular jobs is occupied by the system of norms, habits, shared procedures, plans and schedules, by the system of strict identification and control. The *easy* time of leisure is usually conceived of as unoccupied, unstructured, and fluid, devoid of public discipline. Members of mass post-industrial societies experience such time as free and thus it becomes an object of their desires. But the desire transforms it into rare goods that can be sold and controlled. The trade with free time establishes the economic

109 Olszewski, D., Burkhart, G. 2002. *Drugs in Focus. Recreational Drug Use – a key EU challenge*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.

base of the entertainment and tourist industry, free space is occupied by mass production of various kinds of cultural goods.

But still, under such economic regulation, the domain of free time remains, at least in part, the domain of time unbound, it retains traces of its Dionysian origin. It is connected to the vacancy of vacations and mingles with the nightlife, keeping the chaos of desire unfulfilled and undetermined, beyond the reach of rational discipline and social control. That makes it the source of disorder allied to drugs, music, dance, sex, and trance. A ferment of this domain attracts people of the night, people who are in conflict with the average everydayness since they find it little stimulating, boring, stressful, or even endangering, mostly both. These attitudes make nightlife a borderline sphere that is potentially a source of cultural dissent, criminality, and free associations.

The everyday rhythms are conceived as stressful and unsatisfactory since they strictly determine our place within the system of bureaucratic regulations which lacks freedom. D. Inglis, in his analyses of everydayness states that even our "*emotional responses, the last thing we would think of as being 'bureaucratic' in nature, are themselves both required and enforced by bureaucratic regulations and rational principles. For example, airline cabin staff are rigorously trained and drilled in exhibiting friendly and upbeat emotions to customers. There are professionalized 'feeling rules' laid down for people in certain work situations to follow, so that their emotional responses to patients, customers, and so on follow certain prescribed, predictable patterns, prescription and predictability of actions being hallmarks of bureaucratic ways of organizing people. An important feature of modernity is the degree to which bureaucratic procedures lay down the template for how we should act in everyday situations, and how we are to manage our emotions in line with certain identified stipulations. The extent to which rationalized rules and regulations have penetrated our inner forms of functioning, even to shaping our emotional lives, is a key question that we have to ask of modern Western culture in general, and work culture in particular*".[110]

We can occasionally and for a limited time escape this system to enter the domain of seemingly free, unsanctioned entertainment which is intended for re-creation, restoration of our powers. Societies of entertainment offer a wide range of activities we can do in our free time, from sport to travel, to using drugs or participating in demonstrations. On one hand, the domain of free time is an environment when necessities are postponed, where we spend our time as we please, we associate with whom and where we want to. On the

110 Inglis, D. 2005, p. 31.

other hand, it is important socio-economic source subjected to the multiple strategies of utilisation.

Rave culture

Occupation and regulation of the free time domain can be demonstrated on music. Music is subjected to at least two different regimes. On one hand, music is manifestation of higher culture, subjected to the discipline and practice. "*Music is written down in a special language of its own. If we consider what one has to do in order to become a professional musician playing classical music, one must go through training in the musical educational bureaucracy in order to learn how to read that language and how to speak it oneself (i.e. how to play and/or compose). Just like a doctor or a lawyer, at the end of one's training one gets a qualification that marks one out as a professional, suitably qualified to enter into the professionalized sphere of musicianship*".[111]

On the other hand, music is a part of mass culture, a part of the system of cultural production of mass-media content within the enter- and info-tainment industry. Popular music is thus a sphere occupied by radio and tv stations, organized shows, concerts, and festivals, sanctioned by the network of copyright rules and fees. Amidst this double pressure, the disciplined and institutionalised culture of concert halls on one side, and market driven entertainment on the other, a musical subculture was born, the rave culture[112], which brought psychedelics to me.

Rave culture emerged in Great Britain and United States during the late 1980s, originating in the big city clubs and house parties. Soon, it became synonymous with the free, unregulated leisure time of the western civilisation centres (London, Chicago, New York, Bristol, etc.), which soon spread across the globe. A spark that lit the energy of rave came from the desire for freedom, for freedom to produce and enjoy one's own music, beyond the control of the academy or the market. It is based on the need to create a private musical space, governed by jazzlike improvisation, folk simplicity, raw punk energy,

111 Ibid.

112 Fritz, J. 1999. Rave Culture. An Insider's overview. Eagle Creek: Small Fry Publications; Reynolds, S. 1998. Generation Ecstasy: Into the world of Techno and Rave Culture. Boston: Little Brown & Co.; Matos, M. 2015. The Underground is massive: How Electronic Dance Music Conquered America. New York: Dey Street Books.

and musical non-professionalism. From its beginnings, it started to occupy the nightlife domain through which psychoactive substances circulate freely, regardless the law. This situation is well described from the perspective of the state bureaucracy by Olszewski and Burkhart, as follows: "*The link between recreational psychoactive drugs use and music and nightlife is well established. In 1930s, underground jazz musicians used marihuana and cocaine recreationally. Amphetamines, hallucinogenics and a range of psychotropic medicaments were added by the rock and roll phenomenon in the 1960s and the punk scene in the 1970s. In the 1980s, MDMA, widely known as ecstasy appeared in parts of Europe and began to be used in the dance-scene culture known as rave, acid house or techno. A decade later, dance music and ecstasy had spread throughout the EU with the speed and intensity you would expect in digital age*"[113].

I have encountered this electronic musical subculture in 2004 or 2005, that is, about ten years after it was exported to Czech Republic from Britain. Its original anarchic energy was slowly fading, it already started to merge with mass culture, but it also arrived at its political peak during the clash with the state power at the famous CzechTek festival in 2005[114]. The CzechTek and rave culture in Czech Republic in general thus repeated the same pattern the rave got into in Great Britain and France: the conflict with the mainstream society and the state itself. That is, rave originated as semi legal activity, breaking or evading the law and drug use were concomitant with it. The BBC documentary *Summer of Rave 1989*[115] pictures the emergence of the first wave of rave in the eighties within the clubs and parties of the night London, Manchester and other English cities. Due to the regulation of the opening hours of nightclubs in Britain, organizers of rave parties were compelled to find suitable space for raving that usually took all night, or two. Therefore, a network was established based on telephones and flyers. Information about the prohibited all night parties circulated orally between friends (and friends of friends), or via simple flyers lacking any information about the time and location. Those interested in participation had to obtain a phone number which conveyed required details. Such practice continues until today, improved by the internet and social networks.

The first wave of rave peaked during the summer of 1989 by "the second summer of love". It was unusually hot summer that year, many open-air parties

113 Olszewski et Al. 2002, p. 1.

114 Smh8. 2006. Freetekno & CzechTek 2005. [online] freetekno.cz. Accessible from www.freetekno.cz/Public23/freetekno-smh8.pdf.

115 Davies, A. 23006. The Summer of Rave. [online] BBC. Accessible from www.youtube.com/watch?v=A-XrlMpwEuM.

for thousands of participants were organised all over England, reminding the atmosphere of the peaking hippie culture in the sixties, this time on ecstasy and electronic music. Moreover, the second summer of love was concurrent with the breakup of the socialist block in eastern Europe. Rave accumulated the energy of fin-de-siècle, quickly became popular to the extent that it turned professional and spread as an electronic entertainment genre around the globe. Hunt, Moloney, and Evans comment on it:

> *The development of the electronic dance music scene has come a long way since its early manifestation in the UK and its association with large outdoor or illegal warehouse parties. Today, 'raves' have become transformed into a multimillion pound global phenomenon. The phenomenon became so widespread that it has been described by some researchers as a completely normal leisure option in keeping with the times*.[116]

Such transformation of the Dionysian and independent space-time into a section of the mainstream entertainment industry was unacceptable for certain people, who started the second wave of rave, louder, more aggressive, deliberately anarchic and psychedelic. This time it was not a spontaneous outburst of desire for a free time. It was deliberate and coherent creation of counterculture, an intensive fight for free space and time, creation and maintenance of proper autonomous zones. Its nomadic condensation cores were sound-systems, do it yourself groups concentrated around electronic musical apparatuses. To organise a *free party* for hundreds or even thousands of people requires mobile, energetically independent and sufficiently robust system of gigantic loud--speakers (typically assembled as "sound walls), gramophones, synthesizers, and other devices required to produce acoustic and visual outputs, a generator of electricity, and an adequate transportation (usually vans or small trucks). To keep a sound-system alive also requires people who are willing and able to support it financially and logistically.

An archetypal sound-system and the inspired of whole movement was the British group *Spiral Tribe*. One of its founders, Mark A. Harrison, expresses the idea of sound-system and *freetekno* as follows:

> *An army of insomniac, cyberpunk, DJs – bent on reclaiming the land and eco-revolution? A techno-pagan cult? Demons of chaos? Or just a bunch of rag-tag-chancers with big boots and bass bins? Whatever the perception, Spiral Tribe started out as a group of family and friends who felt that the constraints imposed on our community by the consumer-economy cartels (and their mates*

116 Hunt, G., Moloney, M., Evans, K. 2010, p. 3–4.

> *in government) were (and still are) stifling freedom of expression and stunting creativity. At that time, the budding electronic dance music scene was energising everyone with a new optimism. Underground parties, pirate radio stations and the music produced in people's bedrooms was far better than anything the establishment or corporate world could come up with. Pirate-style, originality and imagination, challenged the old, exploitative status quo*.[117]

Members of the sound-system Heretik, a French analogon of the Spiral Tribe describe their experience similarly in the documentary film *Heretik – We had a dream*: "*In 1993, the Criminal Justice Act prohibits raves because they occupy space. Escaping violent repression, tribes like the famous Spiral Tribe start to travel around the world to organize new kind of techno entertainment, free and alternative. The freeparty movement was born". And individual members of the Heretik sound-system add their comments: "When I was 16, I discovered another way of thinking, a non-judgemental one. I needed to distance myself from the way of thinking I was brought up in. I read Bakunin, Proudhon, etc., and I finally discovered something that I liked. It was techno, drugs, and sex. We took drugs and listen to louds of techno music*".[118]

Without further need to analyse the highly fascinating anatomy of this subculture, it is apparent that the intensity and radical nature of this angry counterculture was quite unacceptable for the mainstream and for the state alike. Rave became such a thorn in the heel for the official culture that it eventually used repression and legal prosecution. After the Spiral Tribe organised a week long illegal party known as the Castle Morton festival, thirteen of its members were imprisoned and accused from several offences against the public order. Subsequent lawsuit took four months and due to "*the adverse publicity attending the event laid the groundwork for the Criminal Justice Act 1994 (CJA), which put the final nail in the coffin of the unlicensed event*"[119], significantly reinforced police authority against UK citizens, bolstered sanctions against loud rave parties, against violation of private property, squatting or unlicensed camping. The Heretik sound-system, or the before mentioned CzechTek festival met similar fate.

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117 Waywardtales – Book: A Darker Electricity [online] Accessible from waywardtales.wordpress.com/book/.

118 Heretik System – We had a Dream. [online] Accessible from www.youtube.com/watch?v=HB4R-yN1nB.

119 South, N. 1999. Drugs: Cultures, Controls and Everyday Life. Worldwide: SAGE Publications.

The first dose of LSD came to me right form this borderline, radical, anarchic and drug propelled environment. Thus, my connection to the trajectory of psychedelics took neither the form of a shamanic session with a sacred plant teacher, nor a meeting of a client with a therapeutic tool, or a scientist with an object of study. It did not take place in religious or therapeutic context, it was not structured by a methodical scientific approach. It was a meeting of the conflicted, unstable, secular, hedonistic, philosophically educated young father and novice teacher with illegal drug in the context of the radical counter-culture. It was an unplanned meeting on the threshold of two cultural spaces, a clash of two social and political strategies. On one hand, it was the anarchic, unbound domain of nightlife, an environment governed by the desire to get rid of social control, to break norms and rules. In this environment, the only authority comes from "I want", everybody is one's own sovereign, one's own law maker who can not be held responsible by anyone else. Such ethos creates egalitarian secondary communities, tribes without chiefs, families without fathers.

On the other hand, there was still the public space, ruled by impersonal system of control, by the discipline of obligations, norms and routines occupied by social institutions like core families, schools, legal system, tax and work offices, factories, and councils. Inability to conform and tempting attractivity of the nightlife then motivates one major strategy, escape.

Meeting the Dragon

Multiple escape strategies that exist in our society: escape to private phantasy, to gabling, to nightlife, to sex, to temporary autonomous zones and subcultures, to sport, to alcohol and other drugs, etc., are motivated by unwillingness to conform to the bureaucratic system of control (or just to demands of everyday life), which determines all aspects of our lives from birth to death. In our contemporary societies of abundance and free time, psychedelic substances have been connected to the dynamics of escape. Yet, their specific properties and the nature of their psychochemical effect radically differ from substances which already occupy the spacetime of leisure. Most of the psychotropic substances we use can be classified as stimulants or sedatives. Substances from both categories run through the domain of work and obligation, as well as through the domain of nightlife and freedom. Rivers of coffee, tea and alcohol, clouds of tobacco smoke circulate within the social body. We stimulate our everyday performance with doses of sugar and chocolate, or even with cocaine and amphetamines, to stay awake and gain quick energy to fulfil our everyday tasks.

Beside stimulation, we also sedate ourselves with various sedatives, hypnotics, depressants, or anxiolytics which dampen us, lower our sensitivity, and help us to withstand the flow of difficulties, problems, information, or meetings of the city dweller's life. And similar dynamics of stimulation and sedation influences the nightlife but appears to be more intensive thus opening space for stronger and more radical effects of psychedelics.

My psychedelic journey started when I realized that usual poisons are normal (and normalised) part of everyday life, that they don't offer alternative, but distraction, oblivion, and in the end, physical dependence. Compared to that, psychedelics coming from the forbidden free spacetime of rave culture, connected to the beat generation and hippie revolution, were hiding unheard of (for me) mysteries of deranged senses and hallucinatory visions. In the context of the rave culture, psychedelics were not another market good, they circulated within a semi-ritualized context of specific psychedelic praxis. In this context, "*a ritual defined by the most general and most basic concepts is a performance or presentation, planned or improvised, which realizes a transition from everyday life to alternative context that transforms it*"[120]. The rhythm of a rave party also corresponds to the Genep's triple structure of ritual since it comprises 1) preliminary, 2) liminal and 3) postliminal phases. A rave party is usually organised at a secluded place (a meadow, deserted factory hall, or other uninhabited places, far away from public spaces (1). Its core phase includes carnivalesque whirl of dance, music, and mind-altering substances (2), and it is completed in a reverberation, gradual sobering up accompanied by a difficult return to the normal way of life (3). Ritual nature of such event is also expressed symbolically, in clothes and hairstyles, in decoration of sound-systems and surrounding dance space.

The psychedelic raving thus comprises quite consistent type of psychedelic praxis, less disciplined than some neo-shamanic or therapeutic ways, nevertheless still ritualised. Therefore, it also includes shared knowledge of the appropriate course of the trance experience, of its risks, duration, nature of effects, etc. Acquiring a psychedelic, if you are lucky, goes often hand to hand with some advice of how to use it. I was warned in advance that the experience I am about to encounter might be unpleasant and unusually intensive. I became familiar with the overall course of experience reading books and internet discussions where people review their psychedelic trips and tried to come to terms with it. Even this wild type of psychedelic praxis thus includes a tradition of a shared

120 Alexander, B. C. 1997. Ritual and current studies of ritual: overview. In Glazier, S. D., ed. Anthropology of Religion: A Handbook. Westport, CT: Greenwood Press, p. 139–160.

knowledge and communication disseminated by personal contact, books, and hypertext of the internet.

After equipping myself with the basic instructions, I took my first LSD in the autumn of 2008. The abnormality and intensity of the experience far exceeded all my expectations. Nothing could prepare me for the experience itself as it went beyond all I knew and felt before. The gap between preceding knowledge and the immediate experience is especially dramatic in this case since the whole habitual cognitive system of perception, emotions, imagination, and thinking gets dissolved, the stabile structure of experience deteriorates, gets unravelled and becomes fluid. The impact of my first psychedelic experience was so immediate and strong that it instantly forced me ask: How is something like this possible? What is going on with my perception? What is the source of the inescapable feeling of unity with the world that I never felt before? How is it possible that my thinking is so clear and distinct, that it has lost its limits a finitude in a way I would never considered possible?

The major part of my amazement was due to the mythical nature of the experience. I was flooded by unexpected imagery of dragon-like creature which swallowed me, became my guide, and before my inner sight started to uncover immense dimensions comprising different worlds and times. Resulting confusion and cognitive dissonance was so strong that it immediately evoked the need to rationalize it, to inquire it. As I was currently unemployed, I decide that I will pursue explanation professionally, and I applied for the postgraduate study. After my first application, titled *Serpent myths: philosophical and biological interpretation* was denied, I applied for the second time with the project of this book which was finally accepted. The first step I had to realize was developing a sound and clear research methodology that would allow to conceive of psychedelic experiences in general. The outline of this methodology creates the content of the following chapter.

Methodology

The concept of transdisciplinarity

Since psychedelic experiences represent a complex problem, they should be interpreted from different disciplinary perspectives as a complex problem surpasses a framework of a single discipline. Hence, the theory of psychedelic experiences proposed in this text requires a transdisciplinary approach based on various human and natural sciences cooperating under the umbrella of philosophical anthropology, which investigates the meaning of psychedelic experiences in the context of human situation in general.

To think according to experience means to entertain a polyphonic transdisciplinary approach[121], because the complexity of psychedelic domain comprises different contexts of human situation in the world that must be approached by different disciplines. To untangle such complexity and express it in writing requires cooperation of mutually assisting perspectives. Nevertheless, any attempt on a rational explanation of psychedelic domain, however complex, must be aware that psychedelic experiences always surpass possibilities of any discourse and that a theory will always remain but a reflection of experience.

To start with, the phenomenological perspective instructs us that in unravelling the inner workings of experience, the experience must pave the way. However, the phenomenological account of psychedelic experience must deal with two crucial obstacles. First, one of its distinctive features is the multi-layered structure whose centre is absent or shifting. A psychedelic effect actually unfolds as a wild mixture of different layers of our embodied conscious life – perceptual, emotional, physiological, neurological, imaginative, conceptual, or cultural, and is irreducible to just one of the layers. Above that, as psychedelic

121 Nicolescu, B. ed. 2008. Transdisciplinarity – Theory and Practice. Creskill, NJ: Hampton Press; Darbelay, F., Cockell, M., Billotte, J., Waldvogel, F. 2008. A Vision of Transdisciplinarity. Laying Foundations for a World of Knowledge Dialogue. Lausanne: EPFL PRess/CRC Press; Hadorn et Al., eds. 2008. Handbook of Transdisciplinary Research. Berne/Zurich/Basel: Springer; Brown, V. A., Harris, J. A., Russell, J. Y., eds. 2010. Tackling Wicked Problems. Through the Transdisciplinary Imagination. London/Washington: Earthscan; Shapiro, M. J. 2012. Studies in Transdisciplinary Method. London/New York. Routledge.

experiences transcend possibilities of language and wakeful consciousness itself, they can never be directly captured in words. On the contrary, as it seems to be the case from the perspective of intoxication, the usual mode of our conscious presence in the world is just a relative, random and temporal formation that presupposes an all-encompassing intertwining as its source.

All that considered, this text pleads for both methodological modesty due to the final ineffability of psychedelic experiences, and pluralism due to their multi-layered nature. The advocated transdisciplinary approach is already familiar to anthropology when conceived as "*an interdisciplinary and poly-paradigmatic science*"[122], as an open, methodologically and theoretically polyvocal set of research and interpretation strategies, which requires constant self-reflection, plurality of perspectives and interdisciplinary dialogue. Psychedelic experiences fall right in the domain of this polyphonic methodology, and can be, for example, described by *the cabling method*,[123] formulated by D. Lewis-Williams. The cabling method is based on the idea that a complex research problem can not be addressed directly, using a simple logical sequence of arguments leading from premises to conclusions. In fact, one needs several lines of argumentation, several levels of description that are mutually irreducible but can form an intercommunicating texture. Such web-like structure is not linear and logical but hypertextual and analogical. In case of psychedelic experiences, one needs to consider several interwoven and irreducible perspectives: a description of subjective experiences, socio-cultural and historical contexts, or pharmacological and neuroscientific analysis. All these distinct lines cannot be reduced to the one general explanation, for they do not use the same vocabulary and do not follow the same argumentation style.

An exact definition of transdisciplinarity needs to distinguish it both from multidisciplinarity and interdisciplinarity. A multidisciplinary research "*addresses problems from more different disciplinary perspectives, while interdisciplinarity implies using methods from one discipline within another one*."[124] An interdisciplinary approach offers a comparison of findings between disciplines which remain separate, while multidisciplinarity approach creates intersections of different methodologies. The goal of transdisciplinary research is to compose the type of knowledge that surpasses necessarily limited perspectives of indi-

122 Budil, I. 2003. Mýtus, jazyk a kulturní antropologie. Praha: Triton, p. 15.

123 Lewis-Williams, D. 2002. The Mind in the Cave. Consciousness and the Origins of Art. London: Thames & Hudson, Chapter 4.

124 Nicolescu, B. 2008, p. ix.

vidual disciplines and aims at their new synthesis independent of the traditional disciplinary fragmentation.

Many theoreticians of transdisciplinarity agree that such approach is necessary in dealing with complex problems, e.g. the problem of psychedelic experiences. The concept of complexity derives from the Latin word *complexus* – "that which is intertwined". A complex problem includes more levels of description and explanation, and it is impossible to grasp just on one of them, therefore, it "*defies a complete definition and doesn't have a final solution since it generates new questions*."[125] Since psychedelic experiences represent a complex problem, the same applies to them, they defy complete definition, affect us on multiple levels, their meaning depends on the context of psychedelic praxis, and there is no universal explanation for them.

Other aspect of transdisciplinarity as applied in this research lies in accepting the essential finality and plurality of knowledge. In terms of transdisciplinarity, uncertainty is the basic research condition, so this kind of research does not aim at an exact, undeniable, objectively true and generally valid findings, but rather at an uncertain, dubious, singular knowledge that defies traditional criteria. I, therefore, believe that explanations presented in this text are plausible but not necessary, they rely more on congeniality, similarity and contextual relations than on the hard evidence and linear logical reasoning. Such kind of thinking is well suited for inquiry into the psychedelic domain, since to comprehend psychedelic experiences means to deal with phenomena which are considered to be illusory and subjective in the negative sense of the word – too vague, overly similar to the raving of psychiatric patients, or too fantastic than to be taken seriously.

Transdisciplinarity also implies that "the integration of the knower in the process of inquiry, which means that rather than attempting to eliminate the knower, the effort becomes one of acknowledging and making transparent the knower's assumptions and the process through which s/he constructs knowledge."[126] It is quite obvious that in the case of psychedelic experiences, the knower cannot be eliminated since the whole inquiry focuses on the interpretation of concrete experiences and draws from their reflections. An integration has two meanings here. Firstly, it means to be embedded within experience, that is, during a psychedelic experience the clear boundary between the knower and the known dissolves and the knower becomes a part of what is known.

125 Montuori, A. 2008, p. 4.

126 Ibid, p. xi.

Secondly, it means to be embedded within the contexts of our situatedness, i.e. to be situated within intertwining that has no outside.

According to Montuori, it is a prerequisite of transdisciplinarity that it "goes beyond the dualism of opposing binary pairs: subject/object, subjectivity/objectivity, matter/consciousness, nature/divine, simplicity/complexity, reductionism/holism, diversity/unity,"[127] since "the disjunctive, binary logic literally prevents some thoughts from being thought, and some possibilities entertained."[128] Overcoming traditional dualities constitutes an important methodological tenet for the thinking from psychedelic experiences, for it implies disregarding the traditional divide between natural and human sciences. To thing from psychedelic experiences requires following two lines, the line of substances and the line of experiences. The line of substances opens with the descriptive level of biochemistry, pharmacology, neurobiology, pharmaco--botanics, etc, while the line of experiences opens up with the domain of phenomenology, psychology, ethnology, anthropology, or philosophy. Both lines intersect within the hybrid disciplinary formations such as ethnobotanics, semiotic biology, psychopharmacology, deleuzian pharmaco-analysis or cognitive neurophenomenology, etc. Since the chemical, personal, and sociocultural levels of psychedelic domain necessarily intersect, an inquiry into this domain requires a crossover of approaches from both natural and social sciences.

The further aspect of a complex problem is that it cannot be examined from the point of view of disinterested observer. T. Jörg states that: "*Complexity is actually a complex problem. It could be even too complex for readers. A reader should therefore realize that the usual thinking about complexity is something different than thinking in complexity as suggested in this book. Our interpretation of complexity is thus rather different. We focus on the very complexity of complexity*."[129] To think *about* complexity means to make it an observable object that can be described from a detached theoretical standpoint. For example, we can have a model of a neural network whose structure can be described, yet, its future behaviour might remain unpredictable. To think *in* complexity (from it, and according to it) means to acknowledge that we cannot withdraw ourselves from the problem, and that our observation is but another complication, another

127 Ibid., p. xii.

128 Ibid., p. xv.

129 Jörg, T. 2001. New Thinking in Complexity for the Social Sciences and Humanities. A Generative, Transdisciplinary Approach. Dordrecht: Springer, p. 46.

plot within the sympoietic[130] process of intertwining. In terms of psychedelic experiences, to think *in* complexity means to think according to these experiences, in analogy with them, or to use the psychedelic alteration of experience as a medium that alters our thinking: how is the experience described, observed and expressed. When, for example, we experience depersonalisation and dissolution of the ego, then it is analogous to our thinking from it. It is like unweaning the intertwinement of distinct exploratory lines without any central thread which would hold them united. L. Wittgenstein has expressed this idea in the concept of family resemblance:

„We see a complicated network of similarities overlapping and criss-crossing: sometime overall similarities, sometimes similarities of detail.

I can think of no better expression to characterize these similarities than family resemblances; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc., etc, overlap and criss-cross in the same way.

And for instance, the kind of numbers form a family in the same way. Why do we call something a number? Well, perhaps because it has a direct relationship with several things that have hitherto been called numbers; and this can be said to give indirect relationship to other things we call the same name. And we extend our concept of number as in spinning a thread we twist fibre on fibre. And the strength of the thread does not reside in the fact that some one fibre runs through its whole length, but in the overlapping of many fibres."[131]

130 Sympoiesis is a mutual co-formation of living systems in an irreducible interaction which encompasses individual autopoietic systems. See Haraway, D., Kenney, M. 2015. Anthropocene, Capitalocene, Chthulhucene. Dona Harraway in conversation with Martha Kerney. In Davis, H., Turpin, E. 2015. Art in the Anthropocene. Encounters among Aesthetics, Politics, Environment and Epistemologies. London: Open Humanities Press, p. 255–270. Also Depner, B. 2000 Sympoeitic and Autopoeitic Systems: A New Distinction for Self-Organizing Systems. Waterloo: University of Waterloo.

131 Wittgenstein, L. 1958/1999. Philosophical Investigations. Second Edition. Translated by G. E. M. Anscombe. Oxford: Blackwell Publishers, p. 32.

Methodological precedence of intertwining

The concept of intertwining[132], which has appeared for the first time in the late works of Edmund Husserl, is one of the strongest fibres in the thread of my approach to psychedelic experiences. In its broadest sense, it is an "*intertwining of my life with the other lives, of my body with the visible things, the intersection of my perceptual field with that of the others, blending of my duration with the other durations*."[133] An intertwining as a multi-layered process of interweaving is not some chaotic tangle, but a domain or sphere of interconnections, an ontological terrain encompassing and including all that appears. It is not just coincidental interconnection of otherwise discrete entities (organisms, subjects, beings, or events), but an all encompassing elemental plane consisting of shared, co-evolving time-spaces. Or, to put it another way, intertwining denotes a sympoietic dynamics and relational structure of being. Merleau-Ponty refers to intertwining along with other terms like "the chiasm", "visibility", or "corporeality".

The etymological origin of the word chiasm lies in the Greek letter X, which can be interpreted as a crossing of divergences, or as interweaving of polar oppositions, such as subject and object, consciousness and thing, mind and body, I and the other, etc. For Merleau-Ponty, such dualities don't form mutually exclusive antitheses, but rather opposing aspects of the one intertwined movement. Subject and object are not separate entities standing one against the other. The outer world of objects is accessible to us as something given in experience, and subjectively given experiences are constituted in the

132 "Edmund Hussserl regularly employs the image of intertwining (Verflechtung) already in the Logical Investigations but more extensively in his mature writings of the 1920s and 1930s, to express the manner in which the various strata of lived experience are in complex relations of mutual foundation and interpenetration. He particularly emphasizes the intertwinings of lived, animate body and consciousness or what he calls spirit (Geist). Husserl's distinct way of describing the intertwinings between body and consciousness, especially in the Ideas II was picked up by Maurice Merleau-Ponty and rearticulated in numerous reconceptualizations, including most famously interwining (l'entrelacs or l'entrelacement) and chiasm (le chiasme or le chiasma), especially in the posthumously published Le Visible et l'invisible and the associated working notes." See Moran, D. 20,13. The Phenomenology of Embodiment: Interwining and Reflexivity. In Jensen, R. T., Moran, D., eds. 2013. The Phenomenology of Embodied Subjectivity. Contributions to Phenomenology, Vol. 7. London: Springer, p. 285–286.

133 Merleau-Ponty, M. 1968, p. 49.

contact between an experiencing subject and the world. In other words, there is no purely subjective or inner domain, and no pure object, in the sense of being without a contact with something else. The life of consciousness is not an inner stream of qualities separated from the world and from the body. Every inside is the part of outside since consciousness is essentially perception which is but another side of the body, and the body is a place through which the outside enters the inside. Thus, what might appear as opposites should rather be understood as poles circulating around each other in mutual exchange, while such exchange establishes a dynamic field encompassing both.

Such dynamics manifests for example in the domain of visibility. I interpret visibility, along with Merleau-Ponty, as a terrain of perception in general. It applies for this terrain that "*he who sees cannot posses the visible unless he is possessed by it, unless he is of it, unless, by principle, according to what is required by the articulation of the look with the things, he is one of the visible, capable, by a singular reversal, of seeing them – he who is one them*."[134]

What does it mean that visible possesses the one who sees, that the one who sees is of the visible? Seeing does not occur inside me, in the eyes, or in the brain, but in between, for the one who sees and the seen are inseparable. Seeing cannot be reduced to purely mental, or purely neurophysiological processes since seeing is an aspect in the overall relationship of seeing organism with its environment. To follow Merleau-Ponty further, a seeing can be interpreted as distant touching. If we can touch something, it means that it is tangible, while tangibility is not a property of things, or of the hand, but rather a medium of mutual encounter. A touching embodied being spreads the tactile field around itself as it moves, fumbles around, and touches things. At the same time, a touching being is implicated in the field, it is also the touched one, namely in the relation to itself as in the case of the hand touching itself. If the tactile being can touch itself, it can also be touched by the others, and thus it belongs to the shared space of tactile communication (touchable, the tactile domain). Therefore, it is possible to interpret seeing as touching on distance. A gaze, according to Merleau-Ponty, encompasses what is being seen and draws it into the field of vision, e.g. the medium of encounter, the dimension of visibility within which the one who sees is simultaneously the one who is seen, who is of the visible.

The encompassing field of visibility further intertwines with the field of tactility, and with all the other perceptual fields. My consciousness, my entire personality, and the modes of my actions emerge within the audible, olfactory,

134 Ibid., p. 134–135.

or tactile environments. In general, as acting living beings, we are of the universal perceptual field (or field of fields), we are immersed in it via our perceiving bodies. To be present in the world as a perceptual being means that once we see, hear, or understand, we can inevitably be seen, heard, or understood. Our perceiving and comprehending orientation in the encompassing environment is grounded in our living and moving bodies which are immersed in the mutual element of corporeality.

In this context, the meaning of corporeality is following:

> What is open to us, therefore, with the reversibility of the visible and the tangible, is – if not yet the incorporeal – at least an intercorporeal being, a presumptive domain of the visible and the tangible, which extends further than the things I touch and see at present. There is a circle of touch and touching, the touched takes hold of the touching; there is a circle of the visible and the seeing, the seeing is not without visible existence; there is even an inscription of the touching in the visible, of the seeing in the tangible – and the converse; there is finally a propagation of these exchanges to all the bodies of the same type and of the same style which I see and touch – and this by virtue of the fundamental fission or segregation of sentient and sensible which, laterally, makes the organs of my body communicate and founds its transitivity from one body to another.[135]

An intercorporeality is comprised here not as a sum of individual bodies, but as an encompassing relational environment, which includes metabolic and communication interrelations between perceiving, interacting, desiring, consuming, excreting, growing, and dying beings, an intertwining of bodies and their environments. According to Merleau-Ponty, a corporeality "*is not a fact or a sum of facts 'material' or 'spiritual'. Nor is it a representation of mind. The flesh is not matter, is not mind, is not substance. To designate it, we should need the old term 'element', in the sense it was used to speak about water, air, earth, and fire, that is, in the sense of a general thing, midway between spatio-temporal individual and the idea, a sort of incarnate principle that brings a style of being wherever there is a fragment of being. The flesh is in this sense an 'element' of Being.*"[136]

Each individual body, that is every perceiving and acting organism, grows up in this elemental intercorporeality like a mushroom's body in mycelium. Our bodies grow in the bodies of other humans and subsist on the bodies of

135 Ibid, p. 143.

136 Ibid, p. 139.

other living beings, representing a segment in the chains of local and global metabolic processes. Environments co-inhabited by interacting organisms permeate them in the form of nutrients and elements, include them as their own parts. My conscious organic body is not a separate, enclosed, and stable system, instead, it is an open unstable system subsisting through the sympoietic intertwinement with other living systems, with whom it is interconnected, and in whose community it is included.

The intertwining itself, the dynamics and the structure of relationality itself is not apparent. What appears to us in our normal state of mind are the things we use, the events that happen to us, or the situations in which we are immediately involved, but the intertwining itself remains hidden. It can not be directly perceived as it establishes the background conditions allowing perception to happen in the first place. In our normal state of mind, we live as separate entities, there is always a distance between me and the world, between the inside and the outside. We don't merge with the element of intercorporeality, we are of it and live within it, but we still put a gap between ourselves and the world through our cognitive actions (touching, seeing, recognizing, etc.). My survival within the environment requires me to control my own actions, to know what and for what purpose I do. I need to be in distant contact, not merging with the environment, but unable to step outside of it. I dwell at the interface, in the process of differentiation between myself and external things and events.

Yet, the intertwining is not completely concealed. It manifests itself in our actions as the pre-reflective, pre-predicative, pre-linguistic, and pre-individual level of our existence. It is, according to Merleau-Ponty, a sphere of elemental, raw, or wild Being flashing at the periphery of our conscious life, hidden beyond the boundaries of what we can control, beyond the boundaries of self-reflection and waking state of mind, in dreams, and other related altered states, including psychiatric hallucinations or psychedelic experiences.

Interpretation of experience introduced in this text therefore draws on the concept of intertwining. From this perspective, experience can not be explained as an inner representation of the outer world, as a detached processing of inner data. Instead, I understand it as a reversible activity of a living system within the world that is composed of environments, whereas a living system is formed by these environments and co-forms them by its own activity. The specific cognitive process that is called psychedelic experience is, on the one hand, always individual and subjective, but, on the other hand, it is not limited to the subjective level, since experience is hermeneutical, reversible process situated within the complex network of wider contexts, material and symbolic respectively.

Hence, the general theoretical framework of this inquiry is build on the following principles:

1) The phenomenological principle claims that the subjective level of psychedelic experiences is irreducible, while the hermeneutical principle claims that the meaning of each experience is determined by the context which makes it possible. Each experience requires an enabling context, and every context of experience is apparent within the actual individual act of experience. The appearance is not a source of itself since it emerges within the intercorporeally and intersubjectively shared world.

2) The process of experience, therefore, occurs within a multileveled and multidimensional complex of related processes, an intertwining. Psychedelic experiences can thus be designated as extended, since they surpass the basic level of the wake consciousness, open the multileveled aspect of our experience and foster the insight that consciousness does not exist only on the level of the self-reflecting ego, but instead emerges as an aspect of the complex permeation of the living being and its environment. Hence, the interpretation of the complex dynamics of psychedelic domain requires disentangling of the singular threads, which represent autonomous levels of its organization: biochemical, neural, sensory, perceptual, imaginary, mnemonic, conceptual and symbolic.

3) The biosemiotic principle claims that to be alive means to cognize, and cognition in the broadest sense of the word is the basic feature of the living system. Consciousness is not situated within an incorporeal mind, nor hidden within the brain processes, it is rather the manner how a living organism expresses its presence in the environment to which it is bound. An environment is a part of the multileveled sympoietic network of living and inanimate systems whose coexistence forms the biosphere. An organism as a living system actively co-creates the environment within which it is situated.

4) The enactive principle: Against the idea that during a psychedelic state we experience an incorporeal and unworldly dimension of our existence, I propose that psychedelics open a wider extension of our embodied existence situated in the intercorporeal world. Therefore, I comprehend experience as embodied and enactive. Enactive embodiment basically means that our conscious life is inseparable from the movement, growth, and adaptivity of a living organism. An inner, self-reflective consciousness is always relative to and conditioned by the whole of the intercorporeal intertwining.

5) The principle of extensiveness: Experiencing is wide or extended. An extension means two things: a) Extension as a medium. Experience cannot exist on its own, it always requires a medium to appear, be it our brain and senses, sounds and images used in communication, or other (technical) media;

b) Extension is context. A conscious activity may only appear in a context, in a life situation. The material element of experience, of any thought, sensation, imagined or hallucinated content of mind, has the form of a communication field that consist in the exchange of signals and meanings between communicating entities and their environment. Hence, psychedelic experiences are, among other things, the ways how make our wider situatedness in the world appear. Not only that we need to have brains and bodies for something to appear to us, but our bodies are always situated in the environment, and the environment is a part of the world itself.

6) The chiasma principle: Experience in general is fundamentally a unity of opposites, Husserl's "Ineinander", or Merleau-Ponty's chiasma, a unity of the inside and the outside, of the inner and the outer side of consciousness. The inner side involves interoception, imagination, memory, self-reflection, etc., and is inseparable from the outer existence in the environment. The inside makes part of the outside, it is outside's manifestation, and the outside allows for our inner states to appear in the first place. Interoception is integral to the holistic process of organism's autoregulation, which is inevitable to maintain its homeostatic stability in environment. Memory and imagination emerge out of enactively established perceptual schemas. The fact of introspection comprised as the relation of conscious being to itself does not mean that consciousness subsists on its own as an independent entity, but that it is capable of self-reference as any living systems.

7) The anti-representationalist principle: Experience is not a system of inner representations of outer world but rather a process of intentional (in the phenomenological sense) and communicative enactment, or negotiation between organism and environment. Various modes of experience such as sensation, perception, imagination, or conceptual thinking, are not some photographic copies of the outside world, but the modes of behaviour a living being uses to communicate with others and to cope with things and events.

To think from and to think according to psychedelic experience

In the frame of this text, to formulate a theoretical account of psychedelic experiences means to think from and according to. The term "to think according to" comes from R. Barbaras's book *Desire and Distance*: "*The goal of philosophy of perception is not to capture perception by means of categories we already posses, but rather an attempt to get transformed in contact with it. Its goal is not so much*

to think experience, but rather to think according to it"[137]. The French expression used in original text reads "*penser selon*", which can be translated as to think from or according to. I will use both terms interchangeably in the similar manner as J. Čapek in the book *Merleau-Ponty: To think according to perception*, where he asserts that: "*to thing according to perception means to find analogies for perception*."[138]

Thinking itself implies a conceptual expression of experience, whose goal is to establish a network of concepts and arguments, and eventually to establish a comprehensible theory. The term "*thinking from*" implies that such conceptualisation should be guided by experience itself without re-course to a previously established theory. The term "thinking according to", e.g. in analogy with experience implies that our attempt to explain psychedelic experience and to reveal its dynamics and structure entails finding analogies, i.e. structural similarities between the different levels of description.

The cognitive domain of psychedelic experiences has many layers and the goal of its articulation is intricate. One of these intricacies is that the states induced by psychedelic have also been called extended or expanded consciousness, for they exceed the personal layer which is under the control of subjective awareness and expands towards wider situatedness. Another problem is that to conceptualize psychedelic experiences requires a kind of intoxicated awareness, a situation when the discursive thinking surrenders without losing. An attempt on the theoretical expression must be based on the balance between saying too little and saying too much. On one hand, to comprehend and, especially to integrate these experiences calls for a narrative of some sort (be it theoretical, literary, or religious), but on the other hand, each narration changes the meaning of experiences for better or worse. In other words, an alert, sober state required for conceptual thinking is disparate from the intoxicated one to the extent that they both represent qualitatively autonomous modes of our presence in the world. Therefore, when someone attempts on translation between the two modalities, s/he must find the balance between the chaotic and complex processes of psychedelic consciousness and the order of conceptual language. And although the direct transcription is unattainable, we must make the most of precise analogies, e.g. half-concepts, half images that leave enough space for the discovery of meaning.

137 Barbaras, R. 2006. *Desire and Distance*. Translated by Paul B. Milan. Red Wood: Stanford University Press.

138 Čapek, J. 2012. Maurice Merleau-Ponty. Myslet podle vnímání. Praha: Filosofia, p. 14.

Fortunately, a rich and well developed conceptual apparatus suitable to express the content and meaning of psychedelic experiences has been cultivated within the western thought for more than hundred and fifty years. Nowadays, in the time of "psychedelic renaissance"[139] and quickly growing "psychedelic science" we can draw on many theoretical, literary, religious, or artistic approaches, and the criterion for the accuracy of various descriptions and explanations is only our experience. To think according to psychedelic experiences, therefore, does not mean to decide for a single correct approach. Rather, in line with the weaving method, each expression of the content and meaning of these experience should be taken as correct only in its own right, e.g. only within its respective framework.

I suggest that dealing with this hermeneutical situation requires staying true to experience itself whenever it is possible and employ an open and comparative transdisciplinary approach. Any acceptable interpretation of psychedelic experience must be aware of its origin and consequences, and maintain the basic prerequisite of transdisciplinarity: the idea that no explanation is exclusive, but always a part of a multivocal texture which lacks a central thread. It also requires subtle, but substantial shift in perspective: to accept that, instead of claiming that thinking explains experience, the experience allows and calls for thinking.

Hence, to think from psychedelic experience means, citing Barbaras, to get transformed in contact with it. But what does this metaphorical expression mean? Barbaras claims that "*we don't want to address perception as but another region among all the other regions of Being. In that case we could simply apply our familiar philosophical tools to it. Instead, we need our philosophical tools to get transformed when confronted with the unique nature of perception*."[140] Regarding psychedelic experiences, to think from them does not mean addressing them via already prepared theoretical tools as but another domain of consciousness. Instead, it should mean to transform our understanding of consciousness in confrontation with the unique nature of these experiences. Nevertheless, the relationship between experience and explanation runs in both directions. In thinking we translate our experiences transforming them into something else. Once we try to render experience understandable, it ceases to be pure experience, and escapes our grasp. Therefore, to think from psychedelic experience

139 Sessa, B. 2012; Roberts, T. B. Four Stages of Psychedelic Renaissance: Towards a Wider Vision [online] academia.edu. Accessible from www.academia.edu/19246312/Four_Stages_of_the_Psychedelic_Rennaissance_A_Wider_Vision.

140 Barbaras, R. 2005, p. 28–29.

means both, to be transformed in the direct contact with it, but also let our thinking enter the meaning of experience, yet without a claim that we can ever make it fully comprehensible. Something is always lost in translation.

The term "thinking from /according to" has also an anthropological, or an ethnographic meaning. To think from means to adopt the so called emic perspective[141], the perspective of insider who gets transformed in the field. A psychedelic researcher may remain impartial and, for example, measure certain brain processes, or keep track of other objectively tangible data. Yet, to fully comprehend the psychedelic domain, one must get involved in the experience directly, immerse itself in it and let it pave the way. To listen to experience does not mean to interrogate it under the surveillance of the pre-established laws, but to let it appear as itself. It also means that we do not conceive of experience as an inner state easily accessible in introspection, but rather as an actual mode of organism's action and presence in the world. And finally, it means that we see organisms as living systems intertwined with the environment, which, as a part of the whole biosphere, forms itself around organisms and is co-formed by them.

In fact, a psychedelic researcher introduced here attempts to maintain both perspectives, emic and ethic at the same time. Experience needs to be conceptualized and grasped in language, but simultaneously remain open to further inquiry. It entails a delicate balancing in between the stream of experience and the discipline of writing, while retaining heterogeneity of both and finding possibility of translation. Such translation of experience into a discursive language entails leaving the experience behind, but also letting it guide us, to think according to it, analogically to it.

The concept of analogy

What is analogy, and what does it mean to think analogically? The classical concept of analogy has been developed by Aristotle. Later, thanks to the tradition of western scientific rationalism founded by Aristotle, it gradually became synonymous with imprecise knowledge, but he himself considered it an important heuristic tool. Aristotle's treatise of analogy may be found in his *Rhetoric*, *Poetics* and in the logical works (*Topics*, *First Analytics*), at the places where he

141 Young, J. 2005. On Insider (Emic) and Outsider (Etic) Views of Self and Othering. System Practice and Action Research, 187 (2): 151–162; Headland, T. N. 1999. Emics and Ethics: The Insider/Outsider Debate [online] Thomas N. Headland – personal site. Accessible from www.researchgate.net/publication/246054591_Emics_and_Ethics_The_InsiderOutsider_Debate.

analyses the concept of metaphor. Medieval philosophy acknowledged at least a limited use of analogy as a cognitive tool. According to some theologians, a finite human beings are not capable of knowing the infinite God directly but can do it analogically. This very idea had later become one of the reasons for denouncing analogy completely in modern thought, rendering it as an example of broad, inexact and speculative thinking that disregards observable facts.

Aristotle's definition of metaphor based on the concept of analogy, as stated in Poetics, reads as follows: "Analogy or proportion is when the second term is to the first as the fourth to the third. We may then use the fourth for the second, or the second for the fourth… Thus, the cup is to Dionysus as is the shield to Ares. The cup may, therefore, be called the shield of Dionysus, and the shield the cup of Ares. Or, again, as old age is to life, so is evening to day. Evening may therefore be called the old age of the day, and old age, the evening of life, or, in the phrase of Empedocles, life's setting sun."[142] According to Aristotle, analogy is essentially a comparison of two relations based on proportion, or similarity. As is B to A, so is D to C. Thus, analogy brings forward a new information, which is not included in neither of the compared relations, but also does not exist without them. E. Itkonen comments on this definition: "From today's perspective, also the other types of metaphor defined by Aristotle turn out to be analogical in character. For instance, the metaphor from genus to species, is represented by the case where a subordinate term is replaced by a superordinate one, like lying an anchor by standing. Now, it is easy to see that all particular postures which qualify as subtypes of standing do so because they are structurally similar or analogous to one another."[143] Analogy is defined by Itkonen as structural similarity and considered to be the kernel of metaphor. Since Itkonen is a cognitive psychologist, it needs to be stressed that I also consider analogy to be a cognitive mechanism, and not just a literary or linguistic trope.

The definition of analogy as a general cognitive mechanism comes from G. Lakoff[144] whose analyses of metaphor corresponds to the cognitive treatment

142 Aristotle. 2013. Poetics. Translated by A. Kenny. Oxford: Oxford University Press.

143 Itkonen, E. 2005. Analogy as Structure and Process. Approaches in linguistics, cognitive psychology and philosophy of science. Amsterdam/Philadelphia: John Benjamins Publishing Company, p. 13.

144 Lakoff, G. 1993. Contemporary Theory of Metaphor. In Ortony, A., ed. 1993. Metaphor and Thought. Cambridge: Cambridge University Press. p. 202–251.

of analogy developed, for example, by D. R. Hofstadter. According to Lakoff, analogy is a cognitive mechanism that lies at the heart of metaphor. The character of analogical process is that of cross-domain mapping, and a metaphor is the process of conceptualisation of one cognitive domain it terms of the other. When we have, for example, the source domain "path" and the target domain "love" then the analogy between path and love allows us to understand love as the "common path of life". The mapping between the two domains is achieved when the elements of one domain systematically correspond to the elements of the second domain. Lakoff states, that "*the metaphorical mapping retains cognitive topology of the source domain consistently with the inherent structure of the target domain*." Such systematic, and according to Lakoff, even ontological correspondence guarantees that the resulting analogy makes sense at all. Therefore, it is inappropriate to make analogy between death and learning, as it is preferable to draw analogy to death using the domain of the day. (morning – birth, evening – dying). In the same vein, Itkonen states that "*an analogy is a mapping of knowledge from one domain (the base) into another domain (the target), which conveys that a system of relations that holds among the base objects also holds among the target objects.*"

The mechanism of analogy was described in detail by Gentner and Calhoun[145], and by already mentioned Hofstadter[146]. Drawing on their accounts, I would explain it as follows. Gentner and Calhoun state that the analogical process is essentially a capability to perceive and use relational similarity. The whole process resembles mapping of a terrain. In a situation, when we are looking for an explanation of something we don't understand, we start comparing the new situation with schemas and structures stored in the memory. A mutual tuning takes place between the maps we already know and the new situation. Relations of mutual reference and inference are established between the two. In the process of tuning and establishing relations a common structure is abstracted, an analogon which becomes the kernel of the relational similarity, being neither the part of the source, nor of the target domain, but rather pertain-

145 dále Gentner, D. Colhoun, J. 2010. *Analogical Processes in Human Thinking and Learning*. in Glatzeder, B. M., Goel, V., von Müller, A., eds. 2010. Towards a theory of Thinking. Building Blocks for a Conceptual Framework. Berlin/Heidelberg, p. 35–48. See also Gentner, D., Holyoak, K. J., Kokinov, B. K., eds. 2001. *The Analogical Mind. Perspectives from Cognitive Science.* Cambridge: Bradford Books.

146 Hofstadter, D. R. 2001. *Analogy as the Core of Cognition* [online]. Stanford Presidential Lectures in the Humanities and Arts [cit. 2016]. Dostupné z https://prelectur.stanford.edu/lecturers/hofstadter/analogy.html.

ing to the interconnection domain, to the domain of relating, or intertwining. When abstracted and singled, it further participates in a new analogical process.

According to Hofstadter, the result of the analogical process is not a "mental atom", but rather a molecule with several nucleuses, encircled by the electron cloud and capable of interaction with other similar molecules. The core of this analogical molecule is then formed by the so called "central cognitive loop" which works this way: A category representing already established analogical bundle is activated by a new experience and brought to the front of our attention. The bundle is partially unpacked and connects to the new experience which is being mapped in the process of imprecise tuning. The new situation is never the same as already stored analogon, but it is similar. The mapping and integration of the new experience into our cognitive architecture is possible because the tiny cords of analogy are no atoms, but molecules, e.g. they are relational similarities that are bound to more than one situation. They have more nucleuses and may connect to another similar analogical bundles. During our lifetimes, we build complexes of these bundles which expand and interact, creating vast categorial networks. A dynamic, multi-layered structure of experience emerges that is build of moving analogical molecules which are not bound to one domain but can permeate different environments.

Workings of analogical machinery is, from the perspective of cognitive psychology, subconscious, it occurs without our conscious intervention. Yet, since we can describe it, it can be used as a heuristic tool, for instance in psychedelic research. That is, the casual explanation of psychedelic experiences is always reductive. We can, for instance, claim that they are consequences of the biochemical and neurophysiological changes in our brain, or that they are results of the action of a psychotropic plant, or again that they are caused by the action of non-human forces, or spirits. An analogical explanation works differently. It does not look for an casual explanation but for similarities. First, the processes on individual levels of psychedelic effect, personal, sociocultural, biochemical, neural, or phenomenal, are described. Then, the process of mapping starts which consists in the search for relational similarities between repetitive structures, resulting in the setting up of an abstracts analogon. In terms of psychedelic domain, the process of analogical mapping has more interchangeable source domains and more target domains. Each level of description represents both domains and the analogical transfer is conducted between more levels in a feedback manner. This way we could be able to construct a model of the whole psychedelic domain.

Domain, field, umwelt, niche

Domain

The aim of this work is to present a model of the domain of psychedelic experiences. The word domain has two basic meanings in this text. The first one is general, domain is synonymous to area, as in "the domain of psychology", or "the public domain", a psychedelic domain is simply the area of psychedelic research. The second meaning which is more important and closer to this inquiry, relates to the concept of cognitive domain. To define the psychedelic domain in the second sense, I draw on the biology of H. Maturana and F. Varela[147], cognitive psycho logy of ayahuasca experiences of B. Shanon[148], and on the classical definition of cognitive domain by B. Bloom[149].

A cognitive domain, according to Maturana and Varela, is a unity of interactions between an organism and its environment[150]. A cognitive domain is a sum of embodied and meaningful actions performed by an organism as it negotiates its situation within a milieu. It consists in patterns of interactions which constitute it from within, and simultaneously it permeates all individual acts and gives them its specific character of the components of certain type of experience. The constitution of a domain correlates with organism's capabilities to act and cognize. A domain represents a lived-world of an organisms that is changing in correlation with modifications of these abilities, just as the abilities are modified in correlation with the demands of the environment.

Other aspects of cognitive domain draw on the classical taxonomy of cognitive domains formulated by B. Bloom et. al. in their psychological theory of learning which distinguishes three basic domains: 1) the psychomotor domain that includes motoric learning; 2) the affective domain that includes emotionality, psychological, and social needs; 3) and the cognitive domain proper that in-

147 Maturana, H. R., Varela, F. J. 1980. *Autopoiesis and Cognition. The Realization of the Living*, Dordrecht: Riedel.

148 Shanon, B. 2002.

149 Bloom, B., Englehart, M., Furst, E., Hill, W., Krathwohl, D. 1956. *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans/Green; Anderson, L. W., Krathwohl, D., eds., 2001. *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

150 Maturana, H. R., Varela, F. J. 1980, s. 12.

cludes the acquisition of knowledge, and the development of logical intelligence. Although Bloom and colleagues do not provide any general definition, it is clear from their treatise that a domain is a set of types of behaviour and cognitive activities pertinent to the basic levels of human existence – the psychomotor domain is the domain of corporeality, the affective domain pertains to emotional life, and the cognitive domain to symbolic thinking.

The idea to interpret psychedelic experiences in terms of cognitive domain comes from the work of Ben Shanon which combines phenomenological and cognitive approach in the following manner:

Technically, what I propose is that cognitive research be centred around what I call 'natural cognitive domains'. A cognitive natural domain exhibits the following characteristics. First, it is part of cognitive expression of human mind. Second, for all human beings it occurs naturally and spontaneously, without prior concentrated deliberation or active intended involvement on the part of cognitive agent. Third, it is phenomenologically distinct, manifesting specific characteristics not shared by other domains. Fourth, it is well defined in the sense that for any specific phenomenological token of the domain, it is straightforward to determine whether this token is a member of this domain. Fifth, it is well demarcated in the sense that the totality of the types pertaining to the domain is distinct. Sixth, the domain manifests exhibit intrinsic regularities and substantial richness and complexity.[151]

Shanon further contends what characteristics of the psychedelic domain should be inquired and how. Above all he asserts that there is no other way how to comprehend and appreciate psychedelic experience than to pass through it. He also contends that there is a two-way interaction between his research of ayahuasca experiences and cognitive psychology. "*Not only can the cognitive--psychological analysis makes a crucial contribution to the study of ayahuasca, the converse is also the case – the study of Ayahuasca may have implications of import to our general understanding of the workings of the human mind. Ayahuasca (along with other mind-altering substances) expands horizons of psychology and reveals the new, hitherto unknown territories of the mind. Thus, the study of Ayahuasca presents new data pertaining to human consciousness, and thus new issues for investigation, new ways to look at things, new questions, and perhaps even new answers*."[152]

The aim of this text is, therefore, to describe what happens within the psychedelic domain, how is the domain structured, of what layers and intersecting

151 Shanon, B. 2002, p. 33–34.

152 Ibid., p. 37.

lines it comprises. Thus, this text proposes mapping, or rather modelling of the cognitive domain from within the experience itself. Such modelling consists in observing intrinsic patterns and regularities emerging from the perspective of the experiencing person on different levels of its experience – starting from the set which stands for pre-understanding in the hermeneutical sense, continuing with various changes in individual cognitive processes such as perception; up to the overall restructuring of behavioural patterns in the fully developed psychedelic state. It needs to be stressed that to comprise psychedelic experiences in the terms of a domain means that they represent a field of interactions opening, closing and re-arranging itself reciprocally to functioning cognitive activities. Its essence is, so to say, interactive, it appears and disappears along with the performance of appropriate activities.

~~The~~ Field

The analogical concept to that of domain is the phenomenological concept of ~~a~~ field. I adopt it from the Czech philosopher M. Nitsche who based his interpretation of the field on the works of E. Husserl, M. Heidegger, and M. Merleau-Ponty.

According to Nitsche, Husserl "usually uses the term field in his explanations of phenomenological reduction. The phenomenological reduction puts the psychological self aside and gains the transcendental self that is a part of a phenomenological field. The transcendental subjectivity is not an objective entity which could be found in our soul or brain, or as a subject of a proposition. It is present in acts of consciousness, that is more likely in things than in the soul. Phenomenological reduction imparts the status of subjectivity to the field, not to a point. To localize the position of human experience then does not mean to look for a place in the sense of a point of departure, but rather to determine the phenomenological field of experience and eventually localize some points of departure in its structure. According to our interpretation, a point (sub-i-ectum) is not the base of a field, but on the contrary the field is the space from which subjectivity comes out and where it can be localized."[153]

The crucial message of this text says that to localize position of human experience does not mean to seek a central point of departure (in the sense of subjectivity), but rather to open a space, while the one who has an experience is not its centre and source, but a relational element. Therefore, when we ask what the source of psychedelic experiences is, or where do they take place, the

153 Nitsche, M. 2013, p. 891.

answer can not be that it is inside our consciousness. The main problem lies in the very concept of consciousness. Phenomenology of embodiment fundamentally claims that consciousness is not something intrinsic, hidden inside our heads, but that it is a relational activity of the living being in the world. The intrinsic side of consciousness is not refuted, but made relative to the system of reactions, negotiations and interrogations conducted between a living system and its environment. The inside and outside are thus necessarily intertwined and inseparable, experience occurs always in between.

Again, how to explain that the field is the space from which subjectivity comes out and where it can be localized? It simply means that the one who is having an experience is not its sovereign and source but its integral part and finds its position within the relational space of its own activity. Such phenomenon of non-centrality of a subject is dramatically apparent namely during a psychedelic experience, since the disintegration of experiencing subject who would be the source of experience and would give it its unity is characteristic of it. To put the centrality of self aside means to make the field apparent. The field is normally transparent as our waking experience is typically centred around the self. During the psychedelic disintegration of the self, the field loses its transparency and its inner structure and dynamics becomes apparent.

In similar vein goes Nitsche's interpretation of M. Heidegger. He claims that for Heidegger "intentionality is not a characteristic of subjectivity. The fact that my consciousness relates to its surrounding objectively does not originate in its subjectivity but is the outcome of the structure of relationality itself. It is particularly this structure located between an object and subject that Heidegger wants to inquire."[154] Using the concept of the field in the interpretation of psychedelic experiences means that my aim is to describe the overall modulation (dynamics and structuration) of a psychedelic field whereas relations within this field are not controlled by the self-reflecting subject, but by the very structuration of the field.

The way the world appears to me during an experience does not depend on what is being experienced or on who has the experience, but on the relational structure itself which is the structure of an interspace (or interface). Nitsche, along with Heidegger, defines it as unconcealment, and claims that "*the specific sphere of unconcealment lies between the dasein and objects in such a way that each linear intentional relation must somehow go through this sphere – and exactly in this sense we say that the field encompasses dasein.*"[155] During psychedelic experience,

154 Ibid., p. 896.

155 Ibid., p. 894.

the whole experiential field undergoes a profound transformation and it is the goal of the fourth chapter of this book to describe this transformation from within always remembering that it is not me who establishes the field but that the field becomes apparent through me as one of its moments.

Nitsche further expands his thoughts about the field considering Merleau-Ponty's topological space. He asks: "*What is the relation between the topological space (milieu) and place (lieu)?*" His answer follows: "*A poignant answer can be found in the fragment Visual image – representation of the world. Todo y Nada from the May of 1960: Being is the place where the modes of consciousness are inscribed as structurations of Being and where the structuration of Beings are modes of consciousness. The in itself for itself integration takes place not in the absolute consciousness, but in the Being in promiscuity*."[156] ~~(253)~~ The concept of topological space corresponds to the concept of the field, and promiscuity or mixture corresponds to the relational structure. The fundamental structure of the field is characterised as a mixture, or chiasma, a feedback relation of being and consciousness, and it corresponds to Merleau-Ponty's concept of corporeality. If the Being (the world, spacetime, the encompassing) is the place to which our modes of consciousness are inscribed, then it is respectively the place to which our modes of embodied and situated activity are inscribed. Activity in this complicated relationship is neither solely on the side of an outer world, nor on the side of intrinsic subjectivity, it occurs in between, in intertwining conceived as mutual permeation of experience and reality, of what is experienced and who is experiencing it within the encompassing time-space.

To explain the concept of the field in more detail, I adopt description of some of its features from Mark A. Farfield[157]:

a) "*A field is a systematic web of relationships. The field is unitary whole: everything affects everything else*". A field is therefore a relational network, it is the relational structure itself. Yet, its unity must be comprised as an open one. A field is nothing we can observe as an object, it is a relational space that allows for observation in the first place. There are individual fields, individual relational domains interrelated with other fields and their modulations and variations. From this perspective, psychedelic experiences are not states of consciousness since they do not originate in mind. More so, they are complex modulations of our experiential field which is interconnected with the fields of other beings.

156 Nitsche, M. 2011. Prostranství bytí. Studie k Heideggerově topologii. Praha: Togga, p. 253

157 Fairfield, M. 2004. *Gestalt Groups revisited: A Phenomenological Approach*. Gestalt Review. 8 (3), s. 336–357.

b) "A field is continuous in space and time. We are not speaking of a line (an infinite series of successive points); we are describing a continuous interconnectedness whose elements cannot be isolated one from the other either in time or in space." What are the elements of the field in our case? The one who has experience and what is being experienced, layers of experience, individual acts of experience and the inside and outside. The elements of the field are the moments of the relational space. While describing a psychedelic alteration of the field, I will describe the alteration of its individual elements in their simultaneous mutual reliance.

c) "Phenomena are determined by the whole field. Everything is of-a-field. The events we experience in this context must be defined in terms of the whole field." What does it mean in terms of description of the psychedelic field? It means that an event on one experiential layer is interconnected with events on the other layers. The transformations of intoxicated perception correlate with the transformations of brain activity, or hallucinatory visions emerge from the de-organized perceptions; the symbolic contents of experience influences the level of bodily movements, etc.

d) "*Perceived reality is configured by the relationship between observer and observed.*" This principle needs to be rephrased as follows: the experienced reality is configured by the relationship between the bodily engaged being and the environment pressing on it and appearing to it. To experience something does not mean to observe but to be active and/or passive in a situation. Experienced reality does not emerge as a representation in mind but as a relation, as a plot, as an encounter crystallizing within the field.

e) "Process: everything is becoming. The experience is emergent rather than fixed. It is of a field that is newly constructed moment by moment." A field is not an empty three-dimensional space, it is not a dimension in the sense of the mathematical system of coordinates. It is an intertwining of relations which encompasses us and which we actively co-create. A field of vision emerges whenever there are seeing beings, it exists as the reciprocity of seeing and being seen. It is always constructed anew, negotiated within the two-way situatedness of a seeing being in visible environment. Analogically, a hallucinatory field emerges whenever there is someone hallucinating.

Niche and Umwelt

The concept of semiotic niche is another important descriptive and analytical concept to delineate the time-space of psychedelic experience. This concept was

forged by J. Hoffmeyer[158] from two sources: the concept of ecological niche, commonly used in ecology, and the concept of umwelt, originally formulated by J. von Uexküll. Since J. Hoffmeyer is a biosemiotician or a semiotic biologist, he connects the idea of semiotic niche to the problem of subjective experience of a living systems.

Now, I should point out very clearly here that I do not wish to contest the view that the inner side of subjectivity per se is beyond the reach of the objective methods of science. But even though science might not need to concern itself with examining the inner side of subjectivity, it may and should be concerned with examining the external side of subjectivity, such as the question of how the possession of subjectivity affects the living system under study. It is not the task of biology to say what animal experiences are like (considered as experiences), but it is the task of biology to deal with the fact that at least some animals have experiences, and to study how this affects their livelihood.[159]

Including the problem of experience into the theory of life necessitates a change of perspective. A living system can no longer be considered an inert object of description, but rather a cognitive system which actively changes its environment while the environment makes it to do so. Activity of all living systems is meaning driven, that is, driven by the need to recognize and interpret system's surroundings and react to its demands. Incorporating the semiotic perspective into the concept of living system, therefore, requires redefinition of what is meant by the surrounding environment, or the niche. J. Hoffmeyers puts it as follows:

> "The niche concept has a long ancestry in ecology. In 1917, Joseph Grinnel defined the niche as the totality of places where organisms of a given species might live. Ten years later, Charles Elton gave the concept a functional turn – seeing the niche as a description of the ecological role of the species, of its way of life, so to say. The resulting duplicity in understanding of the concept of niche has clung to it to this day: On the one side, the niche is a kind of address (Grinnel) on the other hand it is a profession (Elton)."[160]

158 Hoffmeyer, J. 2008, *The Semiotic Niche.* Journal of Mediterranean Ecology. 9, s. 5–30.

159 Ibid., p. 12.

160 Ibid.

Chase and Leibold give a similar definition of ecological niche:

> We propose that a species niche can be divided into two main components. Grinnel (1917), Hutchison (1957), and others focused on a species' requirements for survival in a given environment. On the other hand, Elton (1927), McArthur and Levins (1967), and others focused on the impacts of a species on its environment. Aspects of both components are relevant for different conclusions that one might make about niche relations and their implications for species interaction.[161]

We can start defining semiotic niche via the before mentioned duplicity. On the one side, there are addresses, a totality of inhabitable places eligible for keeping an organism alive while supporting its needs. On the other hand, there are professions, that is, activities of an organism at a given place and time by which an organism keeps itself alive and simultaneously influences its surrounding. A place and the ways of its inhabitation form a unity. A place in this sense is not an empty box but a milieu inhabited by actual community of living systems whose mutual co-habitation and communication represents the conditions of possibility for the emergence of each individual system that is a part of such co-habitation.

Another step in explaining the concept of semiotic niche is to connect the mutual feedback relation of address and profession with the Uexküll's concept of umwelt, introduced by his analogy of the house:

> If we compare an animal's body with a house, then the anatomists have studied closely the way it is built and the physiologists have studies closely the mechanical appliances located in the house. Ecologists, too, have demarcated and investigated the garden in which the house is located. But the garden has always been depicted as it offers itself to human eye, and it has therefore been neglected to consider how the garden changes when looked at by the subject who lives in the house. The garden does not demarcate itself from a surrounding world of which it represents only a section, as it seems to our eye. Rather it is surrounded by a horizon which has the house as its centre. Each house is covered by its own canopy on which the sun, moon, and stars, which belong directly to the house, wander along. Each house has a number of windows, which open onto a garden: a light window, a sound window, an olfactory window, a taste window, and a great number of tactile windows. Depending on the manner in which these windows are built, the garden changes as it seems from the house. By no means does it appear as a section

161 Chase, J. M., Leibold, M.A. 2003. *Ecological niches. Linking Classical and Contemporary Approaches*. Chicago and London: Chicago University Press, p. 19.

> of a larger world. Rather, it is the only world that belongs to the house – its umwelt.[162] (s. 200–201;

Uexküll's theory of umwelt rejects the idea that the outside world is independent on the living and cognising system. If there is a world at all then it is a world of experience, given in embodied cognitive activities, established as a moving place in the performance of inhabitation. A world of a living being is endowed with subjective meaning, it is a perceived world continually transformed in our dwelling. There is no objectively existing world but always a spatial-temporal arena of experience whose changing horizons appear and disappear in mutual multilevel exchange between a living system and its environment. A world that is common to all the living systems is simply the idea of unachievable unity of all the intertwining and intermingling umwelts.

Yet, Uexküll's analogy of the house still needs rethinking as it is, according to some critics, built on the distinction between the closed house-body and the neutral outside of objects. Alice Kliková, for example, points in her critical study of Uexküll's *Theory of Meaning* out that Uexküll's biosemiotics operates with the concept of subjective world that has a perfect spherical shape and represents "*a closed world composed of a finite sum of discrete sign-entities, and of the one directly given subject which constitutes a coherent order, a closed dynamic structure, a system with the defined initial and limit conditions. Each of these closed worlds is complete, misses and lacks nothing while everything perfectly fits into its overall structure*."[163]

For Uexküll, to experience something means to identify various signs appearing in creature's umwelt. But, according, to Kliková, "*to experience something does not mean to recognize a sign, to capture unproblematically identifiable and isolated quality of a material object. Rather, it means to invest oneself in a situation, to be involved in a context of actual possibilities of what may happen. To experience something subjectively means to be addressed, to be concerned in something, to actively identify and so co-create an actual situation, a certain thing that is the case*."[164]

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162 Jakob von Uexküll. A Foray into the worlds of Animals and Humans. With a Theory of Meaning. Transl. by Joseph D. O'Neil. Minneapolis/London: University of Minnesota Press. 2010, p. 200–201.

163 Kliková, A., 2006, Teoretické důsledky Uexküllovy nauky o významu a možnosti její reinterpretace, in Kliková, A., Kleisner, K., 2006, s. 89.

164 Ibid.

Drawing on this altered concept of experience, a new concept of umwelt must be put forward: A living being appears to be a relationship to situations which offer more than its hitherto existing umwelt. Rather, such relationship establishes a meta-situation, a situation of situations, a certain kind of duplicity based on the splitting one's self, instead of total unity. A living being exists in possibilities that are always another possibilities of these possibilities, it exists as a configuration of the same in another manner. A living being is a power to itself, a dynamis that offers to itself a chance of being something more than it is now. Therefore, it can not have permanent control over itself, nor over any other possibility. As itself, it always transcends itself, it is always someone else, it is an intensity of heterogenous field with the multiplicity of simultaneously operating centres. Therefore, it is inappropriate to say that a living being is situated in the midst of its umwelt, and that it is directly and completely given. A living being, as its own evolving power, as identified but never complete, as open is situated on the boundaries of its umwelt. A living being in its actual operating power can be found just on the outer horizon of its world. The umwelt, then, is not a compactly closed area with a subject in its centre, but a system of intrinsic and outside horizons guiding the development of existence. An umwelt is composed of meanings as identifiable situations endowed with potentialities transcending the umwelt and bringing unexpected and alien elements into it.[165]

I have cited this passage *in extenso* because it summarizes several motives important for my analysis of psychedelic experiences, namely: splitting of the self, inability of permanent control over oneself, multiplicity of simultaneously operating centres, incomplete openness, potentiality that transcend the umwelt. Such reinterpretation of the concept of umwelt allows for an interesting explanation of Hoffmeyer's concept of semiotic niche. On the one hand, an encompassing environment of every organism is formed by the demands and pressures of its surroundings and of its own needs. "*The organism must distinguish relevant from irrelevant food items and threats, for example, and it must identify the necessary markers of biotic and abiotic resources it needs: water, shelter, nest-building material, mating partners, etc. The semiotic niche thus comprises all the interpretive challenges that the ecological niche forces upon a species.*"[166] On the other hand, each organism must be capable of diversely interpreting the signs (react to the pressures) imposed by the environment otherwise it would not be able to adapt to changing conditions, to occurrences of the new phenomena and unknown challenges. Therefore, Hoffmeyer defines semiotic freedom as "*the*

165 Ibid., p. 89–90.

166 Hoffmeyer, J. 2008. p. 13.

depth of meaning that an individual or species is capable of communicating."[167] Should there be a depth of meaning, and hence the freedom of interpretation, it seems necessary to enrich the definition of semiotic niche by Klikova's ideas: dwelling on the boundary, non-identity of organism with itself and its umwelt. At the same time, the freedom of interpretation can never be absolute, and although the depth and width of an organism's communicative space must be variable, it is still finite. The semiotic freedom is open but structured.

What are the consequences of this approach in terms of modelling the psychedelic domain? First, the domain does not consist just of intrinsic cognitive processes. Rather, a modelling of the psychedelic domain entails describing the fundamental regularities of the structure and dynamics of inebriated experiencing. Unfortunately, such description requires direct involvement in the experiential field itself since the field does not lie outside of actual experience waiting to be described. On the contrary, as I am involved in the field, it only emerges in the process of my embodied encounter with anything that comes from beyond the boundaries of our usual live-world. Second, the psychedelic domain is not a closed sphere with the subject in its centre but a decentralized, widely open hallucinatory time-space of intoxicated life which has multiple centres; crystalizing, pulsating attractors around which the psychedelic experience organizes itself.

Methodological summary

The methodology of this text draws on the concepts of transdisciplinarity, complexity, intertwining, domain/field/niche, analogy, and thinking from and according to experience. Its main goal is to formulate a multilevel rhizomatic model of psychedelic domain. The text uses the three main methodological tools: 1) autoethnographic and sociocultural analysis which includes the description of the personal trajectory and its intertwinement with the sociocultural context; 2) phenomenological and cognitive analyses of psychedelic experiences; 3) pharmaco-analysis of interconnections between biochemical, neural, personal and sociocultural levels of experience.

The whole text is built around inconsistently appearing storyline of my own psychedelic praxis. It begins with the prelude explaining my path toward the encounter with poisons (chapter 1), continues with the search for an appropriate theoretical perspective that would adequately respond to the encounter

167 Ibid., p. 14.

(introduction and chapter 2). In the chapter 3, the concept of psychedelics is considered critically, being another component in the complex plot of the encounter. The last and the key chapter 4 brings forth the proper analyses of the process and different aspects of psychedelic experiences.

The general context and the starting point of all presented analyses lies in the description of subjectively experienced psychedelic states. The emic and ethic perspectives are merged together in these descriptions as it is, on one side, impossible to be disinterested and uninvolved, but, on the other hand, it is necessary, for theoretical reasons, to find a distance allowing for a description. Therefore, to think from psychedelic experiences means, in the first place, to become bodily, emotionally and cognitively involved; it means to lose distance and become temporarily unable to convey the contents of one's own experience since one's personal perspective is overpowered by the stream of psychedelic process. But at the same time, if we do not want to accept already existing interpretations or abandon the theoretical approach altogether, a new explanatory model must be found. Hence, the description, explanation and interpretation of psychedelic experiences must somehow become a part of the experiential process itself. Such demand calls for another kind of reflection. It can not be a reflection made from a zero point of disinterested observer who is able to map the inquired terrain disregarding his or her place in this terrain. Rather, it is a reflection which brings forth the path in walking, a step-by-step reflection establishing the described/experienced terrain which is simultaneously being transformed by the things it encounters there.

Psychedelic rhizome

The concept of rhizome

The next step in the modelling of psychedelic domain is to clarify what are psychedelics and why they were given this name. The main question is why these substances should be classified as psychedelics and not as something else. Especially when we consider that there are many other concepts which can be and are used to designate these substances. As the following citation proves, it is virtually impossible to arrive at a fitting name:

> *Many different names have been proposed over the years for this drug class. The famous German toxicologist Louis Lewin used the name phantastica earlier in this century… The most popular names, hallucinogen, psychotomimetic, and psychedelic have often been used interchangeably. Hallucinogen is now, however, the most common designation in the scientific literature, although it is an inaccurate descriptor of the actual effect of these drugs. In the lay press, the term psychedelic is still the most popular and has held sway for nearly four decades. Most recently, there has been a movement in non-scientific circles to recognize the ability of these substances to provoke mystical experiences and evoke feelings of spiritual significance. Thus, the term entheogen, derived from the Greek word* entheos, *which means 'god within', was introduced by Ruck et al in 1979 and has seen increasing use. This term suggests that these substances reveal or allow a connection to the divine within. Although it seems unlikely that this name will ever be accepted in formal scientific circles, its use has dramatically increased in the popular media and on internet sites. Indeed, in much of the counterculture that uses these substances, entheogen has replaced psychedelic as the name of choice and we may expect to see this trend continue*.[168]

If we accept that no singular proper term that would exclude all the others is viable, then a solution to the problem of classification is to construct psychedelic rhizome. Psychedelics are quite precise examples of rhizomatic structure as was defined in the *Thousand Plateaus*.[169] Deleuze and Guattari defined rhizomatic

168 Nichols, D. 2004. *Hallucinogens*, Pharmacology & Therapeutics. 101 (2), 131–181, p. 132.

169 Deleuze, G., Guattari, F. 1987.

structure as the opposite to the tree structure. A tree structure is hierarchical, centralized, and unified, while rhizomatic structure is non-hierarchical, decentralized and lacks firmly delineated boundaries. From this perspective, psychedelics are neither things or chemical substances, nor mushrooms or potions. They do not present an identifiable unity, but a multiplicity (a rhizome): a multitude emerging in non-linearly interconnected network, crystalizing on various levels.

There are several aspects in the Thousand Plateau's definition of rhizome that are important here:

> 1) „*Principles of connection and heterogeneity: any point of a rhizome can be connected to any other, and must be… not every trait in a rhizome is necessarily linked to a linguistic feature: semiotic chains of every nature are connected to very diverse modes of coding (biological, political, economic, etc.) that bring into play not only different regimes of signs but also states of things of different status*."[170]

A psychedelic rhizome is composed of different horizontal layers and transversal lines. Showing the nature of psychedelics entails uncovering the character of these layers and interconnecting lines through respective levels of description. The level of naming contains conceptual abstractions which open different perspectives on psychedelics. The choice of the name is usually based on the experiences one has with these substances, and on the interpretation of these experiences. Our experiences with psychedelics are based on the way they influence our behaviour. Although their influence is primarily corporeal, particularly brain related, it is not comprehensible without considering their sociocultural and ecological contexts. Therefore, to unravel intertwined layers of the rhizome, we need to bring into play not only different states of things (molecules, neurons, brain states, etc.), but also different semiotic regimes (narratives and interpretations).

Psychedelics are complex chemical compounds often containing more different substances whose effects supplement each other. They are capable of binding to analogous structures in the brain and elsewhere in the body. Transformation of bodily processes induced by their consumption generates transformations of all aspects of experience. Subsequently, psychedelic transformation of experience renders the need for interpretation and consequent formation of a psychedelic praxis. In other words, the transformation on the phenomenal level starts the process when the newly acquired experiences are

170 Ibid., p. 7.

being integrated into existing cognitive and socio-cultural contexts. Hence, we can speak of a cascade of effects: the relation between the chemical structure of a substance and biochemical structure in the brain generates a psychedelic function on phenomenal level – an altered state of consciousness; the relation between the usual state of mind and its altered version generates cognitive dissonance; the cognitive dissonance caused by the psychedelic effect renders the need for integration into our normal live-world, thus generating a particular mode of psychedelic praxis and explanatory discourse.

> *2) A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles. A semiotic chain is like a tuber agglomerating very diverse acts, not only linguistic, but also perceptive, mimetic, gestural, and cognitive.*[171]

A designation such as psychedelic ~~one~~ resembles a tuber, or the structure of an onion comprising various semiotic chains, i.e. distinct ~~levels~~ of meaning that intertwine with power and other relations (the problem of criminalization, revolution, or spiritualisation), and with the modes of socio-cultural praxis.

> *3) Principle of multiplicity: it is only when the multiple is effectively treated as a substantive, 'multiplicity', that it ceases to have any relation to the One as subject or object, natural or spiritual reality, image, and world. Multiplicities are rhizomatic and expose arborescent pseudo-multiplicities for what they are… A multiplicity has neither subject nor object, only determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing*[172]

What I suggest is that psychedelics are rhizomatic multiplicities; they do not have any relation to the One as they are multitudes. They surpass the line between object and subject, natural and spiritual, image and world. To define them means to operate on at least four levels of description which are themselves other multiplicities:

A) ~~Biochemical~~ level: the level of biology, chemistry, brain processes, sub personal microlevel. It is a microlevel characterised by high velocity, level of biochemical signalization, pre-subjective and pre-linguistic level integrated to the network of biosemiotic intercorporeality. The problem of induction by

171 Ibid.

172 Ibid., p. 8.

a biochemical transformation of bodily functions, and the question of pharmacological mechanisms pertain to this level.

B) The experiential level: subjective or phenomenal level, a macrolevel of phenomenological and cognitive descriptions. It includes the structure and dynamics of the psychedelic domain in proper sense; it is the level of appearances, altered cognitive states and processes, and hallucinatory content. The problem of the set and setting links this level to the next ones – socio-cultural and ecological.

C) The socio-cultural level: symbolic, linguistic, intersubjective, social, ritual, institutional level. It includes the problem of the contract with consciousness, that is, the social consensus regarding the shared meaning of altered states in general; also, the problem of psychedelic praxis and narrative (interpretation, classification); and the problem of the relation between the normal and abnormal.

D) The ecological level comprises the relation between an organims and its environment; it permeates all three previous levels. There are several problems to be discussed on this level: ecology of psychoactive organisms which are sources of psychedelic substances; ecology of culture, i.e. relation between society and its environment; ecology of experience, i.e. the relation between experience and environment; the problem of symbiosis and sympoiesis.

All the above described dimensions of the psychedelic rhizome are mutually intertwined and interconnected in numerous ways; different flows run through the rhizome, intersecting lines transform it while the new connecting knots emerge. A psychedelic crystallizes and manifests itself on various interlinked levels~~, it grows.~~ It appears as a chemical substance, neurotransmitter analogue, inducer of hallucinations, a drug, a tool to communicate with spirits, a therapeutic tool. It is a frog, a plant, a cure, a poison, magic, a book, raving, a cult, or a ritual. It possesses the power of transformation and interconnection, opens the molecular plain of flows, enables various levels and layers to permeate, deteritorializes the sedimented functional loops.

In the first place, psychedelics are non-human, pre-cultural. They originate in a natural habitat and their effect changes the function of our bodily processes which are older than our cultural programming. Hence, a psychedelic experience is always an encounter with a non-human element, a natural substance whose primary effect does not work on the symbolic level of ~~a~~ shared language and social action, but on the level of sub-personal processes. The first layer of psychedelic encounter is biochemical. Molecules of a hallucinatory substance bind to the neurotransmitter amino acids in the brain and change neurophysiological processes, putting human experience under the influence

of the non-human element. The first layer of psychedelic effect is therefore pre-subjective and pre-conscious.

Yet, psychedelics are not just chemical substances. Since they are biochemical agents present in living organisms, they start to become chemicals when classified as such. Becoming psychedelics comes after becoming chemicals. First, they are synthetized, then studied and interpreted. Before and beside that, they have also become magical potions, plants of power[173], spirits[174], or the substances that reveal the divine within[175]. All these forms of becoming – becoming psychoactive, psychotropic, psychedelic, hallucinogenic, etc., link to a type of use and interpretation. Psychedelics do not get all these names until encountering human psyche, until they have influenced and transformed human mind, until they have induced a certain type of experience which is afterwards repeated and interpreted in a specific socio-cultural context.

Presented description of the psychedelic rhizome is thus based on the methodological precedence of intertwining. I will start to unravel the complex rhizomatic structure of these entities on the chemical level. But, if I speak about chemical substance, I do not mean any actual material thing of a specific form, colour, and odour. Rather, I consider it to be a configuration, a pattern, or a structure that can form a relation with other configurations. In fact, psychedelics can not be identified and classified outside a context, outside a network of relations within which they act.

Chemical substances

Initial steps in unravelling the psychedelic network lead to the depth of the chemical level, or to the microlevel of biochemical materiality comprising fast biochemical processes. From the perspective of chemistry, most psychedelics

173 Viz Savinelli, A. 1953/2002. *Plants of Power. Native American Ceremony and the Use of Sacred Plants*. Summertown, TN: Native Voices.

174 Beyer, S. V. 2009, p. 110–122.

175 So called entheogens. See Gordon Wasson, R., Kramrisch, S., Ott, J., Ruck, C. A. P. 1986. *Persephone's Quest: Entheogens and the Origins of Religion*. Yale/New Haven: Yale University Press; nebo Schultes, R. E., Hofmann, A., Rätsch, Ch. *Plants of the Gods. Their Sacred, Healing, and Hallucinogenic Powers.* Rochester/Vermont: Healing Art Press.

are monoamines[176]. Monoamines constitute a wide group of organic substances with the amine core and added aromatic ring. Monoamines fulfil important function in several types of organisms across biosphere, including humans. The group involves, among others, substances such as serotonin, dopamine, amphetamine, histamine, melatonin, phenylethylamine, noradrenaline and ~~adrenalin~~, etc.

The majority of psychedelics, besides the group of so called dissociatives[177], is chemically derived from essential amino acids, or from their direct derivates, specifically from the tryptamine (the derivate of L-tryptophan amino acid) and phenylethylamine (the derivate of tyrosine). All amino acids are amines, and tyrosine with tryptophan are amino acids with aromatic core (a hydroxyl group). Substances such as mescaline[178], MDMA[179], or 2-CB[180], among others, are derived from phenylethylamine. Most of the remaining psychedelics, for example DMT[181], LSD[182], bufotenine[183], or psilocybin[184], are derived from tryptamine. Amino acids[185] from which psychedelic monoamines derive from are biogenic, or more precisely, proteinogenic, and essential. To be proteinogenic means to belong among twenty amino acids participating in the chemical processes of all living organisms. Psychedelic are, therefore, derive from elementary compounds

176 Torre, J. C. de la. 1972. *Dynamics of Brain Monoamines*. New York/London: Plenum Press; nebo Kuei-Yuan, T., Atzori, M., eds. 2007. *Monoaminergic Modulation of Cortical Excitability*. New York: Springer.

177 Substances like phenylcyclidin (PCP), DXM, ketamine, ibogain, salvinorin and many more. Sessa, B. 2012. s. 27 introduces two groups of dissociatives antagonisté NMDA antagonists and Kappa-opioid agonists. See also Lim, D. K. 2003. *Ketamine Associated Psychedelic Effects and Dependence*. Singapore Medicinal Journal. 44 (1), 31–34.

178 Rätsch, Ch. 2005, p. 846–848.

179 Schulgin, A. T. 1986. *The Background and chemistry of MDMA*. Journal of Psychoactive Substances. 18 (4), 291–304.

180 *2-CB chemistry*. [online] erowid.org. [cit. 2016]. Accessible from https://www.erowid.org/chemicals/2cb/2cb_chemistry.shtml.

181 Rätsch, Ch. 2005. p. 852–854.

182 Snow, O. 2003. *LSD*, Spring Hill, FL: Thoth Press.

183 Rätsch, Ch. 2005, s. 817–819.

184 Ibid., s. 856–858.

185 The literature on amino acid is quite extensive, see, for example, Meierhenrich, U. 2008. *Amino Acids and the Assymetry of Life*. Berlin/Heidelberg: Springer-Verlag.

participating in the mixture of life. Having structural similarity and origin in the basic organic compounds enables psychedelics to take part in several vital organic functions and processes. The essential character of twenty basic amino acids means that organisms are unable to synthesize them themselves and must receive them in food. Whereas the derivates of essential amino acids, monoamines, are necessary for healthy functioning, development, and survival of wide range of organisms.

Amines and amino acids are also classified as organic, heterocyclic, and aromatic compounds of nitrogen. Nitrogen is indispensable in primary metabolism, that is, in the sustenance of plants and animals alike. Plants convert inorganic nitrogen into organic compounds, such as amines which become nitrogen storage devices. Animals receive nitrogen from plants, which renders them dependent on plants as means of their survival. Animals receive nitrogen to create proteins and release them in the form of urea, ammonia, or the uric acid. Since nitrogen is biogenic, all its organic compounds, ~~beside~~ amino acid, also nucleic acids, chlorophyll, enzymes, pyrimidine and purine bases, etc., are essential parts in live sustaining processes.

Another chemical feature of monoamines, which is crucially important in our analyses, is the fact that they are analogous to the so-called neurotransmitters, that is, to serotonin, dopamine, or glutamate. Monoaminergic system~~s~~ linked with monoamines represent the basic system for monoamine transport in the brain[186]. Close affinity between psychedelics and neurotransmitters establishes the base of its neurochemical effect, since thanks to this structural similarity they are to bind to neuronal receptors of the transport systems.

The above description of the chemical level ~~of description~~ allows me to classify psychedelics using the following terms: 1) tryptamines and phenylethylamines; 2) psychotropic monoamines; 3) consciousness altering derivates of amino acids; 4) organic compounds of nitrogen. But, as it should be clear by now, the chemical description is insufficient. Originally, before their chemical synthesis by humans, psychedelics have been components of living organisms, hence their effect must be also explained from the perspective of biochemistry, that is, due to their role both in the metabolic exchange and the environment. The chemistry alone is not sufficient to determine the nature of psychedelics. Biochemistry as a science of chemical processes in living organisms, adds another level of description, enabeling us to determine the general function of psychedelics within the live processes ongoing in the environment, and com-

186 Costa e Silva, J. A., Macher, J. P., Olié, J. P. 2011. *Neuroplasticity: New biochemical mechanisms.* London: Springer Healthcare; nebo Kuei-Yuan, T., Atzori, M. 2007. Monoaminergis Modulation of Cortical Excitability. New York: Springer.

prehend not only their environmental origin, but also their pharmacological action inside our organism.

Alkaloids

Biochemistry classifies psychedelics as alkaloids, but the precise nature of alkaloids is not easy to define. T. Aniszewski states in the book *Alkaloids: Secrets of Life* that "*the biological and chemical nature of this group of compounds leads to the conclusion that each definition of alkaloids is either too broad or too narrow. A short exact definition is not possible without a lengthy list of exceptions*"[187]. Instead of giving a precise definition, Aniszewski chose a transdisciplinary approach to reveal ~~the alkaloid nature~~ from various perspectives – chemical, biological, technological, and ecological, to show how they permeate life processes on multiple levels.

The term alkaloid was coined by W. Meissner, an apothecary from the German city of Halle. He named the substances ~~as~~ issue alkaloids since, according to his observations they behave as alkaline salts, i.e. alkalic compounds soluble in water. Aniszewski categorizes alkaloids as genuine, proto and pseudo alkaloids while the pseudo alkaloids differ from the other two groups in that they do not derive from amino acids. Psychedelic alkaloids belong among the genuine alkaloids; thus, the amino acids are their metabolic precursors. It is important, from the biochemical and ecological point of view, that genuine alkaloids are products of secondary metabolism. A primary metabolism is metabolic exchange between organism and environment that is essential for the growth, development, and reproduction. Absence of primary metabolites – carbohydrates, lipids and proteins, results in death. Secondary metabolites, on the other hand, such as alkaloids, phenols, steroids, resins, essential oils, lignins, tannins, etc., are dispensable in terms of survival. They are, so to say, second grade products and depend on the functional primary metabolism. That is why, until the midst of the sixties, scientists considered alkaloids waste products.[188]

Alkaloids are present across the whole biosphere, mostly in plants, but some mushrooms and animals also produce them. To this day, according to Aniszewski, about eight thousand different alkaloids have been described, whereas at least about one hundred new ones are being added each year. To be

187 Aniszewski, T. 2007. *Alkaloids – The Secrets of Life; Alkaloid chemistry, biological significance, applications and ecological role*. Amsterdam/Oxford: Elsevier, p. 2.

188 Ibid, p. 122.

considered as alkaloid producing, a plant must contain at least 0,01% of alkaloid, which pertains approximately to 25% of higher plants. Nevertheless, alkaloids can be also found in lower amounts in many other plants. Moreover, they circulate in metabolic pathways among various organisms that consume them or are influenced by them. Aniszewski mentions the following alkaloid producing plant families: Apocynaceae, Asteraceae, Loganiaceae, Papaveraceae, Turaceae, Solanaceae, Erythroxylaceae, Boraginaceae, Fabaceae, Menispermaceae, Berberidaceae, Ranunculaceae, Liliaceae, Rubiaceae, Amaryllidaceae, Elaeagnaceae, Zygophyllaceae, or Lycopodiceae. In the mushroom kingdom, the following families contain alkaloids: Psilocybe, Conocybe, Paneolus, and Stropharia, Aspergillus, Rhizopus, Penicillium, and Claviceps. There are also bacterial alkaloids produced by, for example, genera such as Pseudomonas. Many kinds of animals produce alkaloids: genera Salamandra, Saxidomus, Phyllobates, Dendrobates, Castor, Moschus, Glomeris, or Polyzonium. There are alkaloids producers among the sea organisms from genera Ptilocaulis, Hemimycale, or Glomeris; species Crambe Crambe, or the starfish Fromia monilis and Celerina heffernani; and there are others among amphibians, such as genera Osteocephalus and Melanophryniscus. Among insects: ladybugs, some night butterflies from the family Chrysomelidae, also Alticidea, and some species of ants, namely genera Odontomachus and Solenopsis. Different alkaloids are also present in many mammals, including humans. There are three different alkaloids found in humans which are of our major interest here, namely serotonin, dopamine, and tryptamine. Yet, the question of origin of mammal alkaloids remains open since their biosynthesis requires amino acid, that is, the acids animals can not produce themselves.

From the chemical point of view, alkaloids are heterocyclic compounds, i.e. organic substances containing a heteroatom of nitrogen added to the obligatory carbon. One of the definitions states that alkaloid "is every biologically active heterocyclic compound containing nitrogen which can be pharmacologically active". As was already said, to classify a substance as an alkaloid, it needs a secondary metabolite derived from an amino acid, serving as a source of its basic structure and nitrogen. The nitrogen contained in alkaloids is always synthesized in cooperation with the enzymes which serve as the protein catalysts. Beside that, the synthesis of an alkaloid also requires a chemical substrate to happen. The substrate comprises four substances: acetyl coenzyme, shikimic acid, mevalonic acid, and deoxy-xylulose.

Thus, the biosynthesis of an alkaloid depends on the existence and action of proteins, amino acids, and chemical substrate. The synthesis itself is quite

complicated, and considering that alkaloids are not requisite in immediate subsistence, the question arises why all the different organisms produce them. What is the purpose of caffeine if coffee plants? What is the purpose of psilocybin in psilocybin mushrooms, or muscarine in toadstools? What is the purpose of bufotenine in Bufo alvarius, or morphine in opium poppy? That is, coffee plants do not drink their own brew, and opium poppy does not get intoxicated by opium.

Considering that "*all alkaloids are neurotransmitters*"[189], and that they are usually toxic for organisms, a hypothesis comes to the fore that the main function of alkaloids is defensive, that the reason of their production is to repel predators. Yet, Anizsewski holds this hypothesis to be a simplification for the three linked reasons: 1) alkaloids are not toxic for the producing organism; 2) they have multiple inner functions; 3) their molecules change structure, and hence the character in relation to the cellular environment. Obviously, the external defensive function can no be denied, and it might appear as even more important. Yet Aniszewski believes that the external function is secondary since it presupposes a complex and substantial inner activity. An alkaloid is usually not the end product in metabolism and is often utilized in subsequent metabolic and regulatory activity. Its parts tend to be further metabolized into postcursors which participate in additional processes of synthesis or degradation. It is natural for them to be a part of metabolic chains within a producing organism, and to be endowed with many inner functions.

Especially noteworthy is that alkaloids are active even on the genetic level. They are requisite in cellular activity and in the realization of the genetic code in genotype. Their metabolism is genetically coded, and to date about thirty different genes have been described to code it. Alkaloids are, thus, related to gene expression, influence DNA and RNA, and the protein synthesis in general. They are even capable of changing DNA, deforming cells, and causing so called locoism. They influence the electron chains in cells and modulate the activity of enzymes. They are indispensable in metabolic activity as inhibitors or catalysts of other molecules. They serve as active containers of nitrogen and participate in basic life processes – in endogenous protective and regulatory mechanisms within cells; play important roles in immune system of animals and plants, operate as neurotransmitters constituting important part of the signal systems in plants, and nervous system in animals; finaly, they also provide cell protection.

189 Ibid., p. 169

Therefore, the primary purpose of alkaloids lies in their inner regulation, stimulation of growth, and adaption to environment. Their external function depends on this inner context. According to Anizsewski, their external functions are the following: reaction to stress, protection against pathogens and pests (they have anti-microbial and anti-parasitic properties); selective biotoxicity against alien organisms and cells; positive influence on other organisms. Alkaloids are, therefore, not just protective toxins, but mediators between an organism and its environment. They ensure both the inner communication (interconnection and overall biochemical integrity), and the external communication (by entering other organisms and regulating their behaviour).

We can speculate that their external functions play part in the coevolutionary context since in many cases a mutual interdependence between the biochemistry of plants and animals which consume them has been established. Aniszewski claims that alkaloids evolved in the co-evolutionary process and themselves constitute a part of adaptive processes leading to the permanent coevolution[190] via physiological and biochemical adaptation. The respective mechanism of adaptation pertains to both the primary and secondary metabolism, of which alkaloids are an indispensable part. Distribution of alkaloids in plants and other organisms is therefore connected with their habitat, their ecological niche, with the presence of consumers, competitors, or symbionts. In this context, psychedelics might be classified as altered states inducing alkaloids.

Neurotransmitters

Psychedelic action of some alkaloids pertains to their neurotransmitter nature, or more precisely to the fact that they are analogous to endogenous neurotransmitters of the human nervous systems. A neurotransmitter[191] is an

190 Ibid., p. 179. The concept of coevolution is rather wide and pertains to several disciplines. For the biochemical perspective see Spencer, K. C., ed. 1988. *Chemical Mediation of Coevolution*. San Diego: Academic Press, Inc.

191 Bohlen und Halbach, O. von, Dermietzel, R. 2006. *Neurotransmitters and neuromodulaters. Handbook of receptors and Biological effects*, Weinheim: WILEY-VCH Verlag; Webster, R., A., ed. 2001. *Neurotransmitters, Drugs and Brain Funtion*. Chichester: JOHN WILEY & SON; Perry, E. K., Ashton, H., Young, A. H., eds. 2002. *Neurochemistry of Consciousness: Neurotransmitters in Mind*. Amsterdam: John Benjamins Publishing Company; Tracey, D. J., Paxinos, G., Stone, J. 1995. *Neurotransmitters in the Human Brain*., New York: Springer Science.

extracellular signalling molecule emitted by a presynaptic neuron on chemical synapses which transmit the signal to the postsynaptic neuron. The response to neurotransmitter's action, excitation or inhibition, depends on the receptor of the postsynaptic cell. Ability of neurotransmitter to induce a response depends on receptors to which it binds. Except for acetylcholine, classical neurotransmitters are amino acids or their derivates[192]. According to K. Cherry[193], neurotransmitters can be divided into six basic types: 1) acetylcholines; 2) amino acids; 3) neuropeptides; 4) monoamines (epinephrine, norepinephrine, histamine, dopamine, and serotonin); 5) purines; 6) lipids and fats. Cherry further claims that identification of a neurotransmitter must comply with the following rules: a) a molecule must be produced inside the neuron while a precursor ensyme is also present; b) there must be sufficient amount of the substance to induce action in the postsynaptic neuron; c) the substance must be emitted by a presynaptic neuron and the postsynaptic neuron must contain receptors to which it can bind; d) the reuptake mechanism or an enzyme must be present to stop the activity of the substance.

Considering the relation between neurons and neurotransmitters, it might seem obvious, that only organisms with neural cells, i.e. with a nervous system, contain neurotransmitters. Yet, the presence of monoamine alkaloids in mushrooms and plants shows that the situation is more complicated. V. V. Roshchina, therefore, suggests using the term "biomediator" instead of neurotransmitter. In this respect, she claims that:

> *The 'living' environment of a human includes microorganisms, plants, and animals as well as other human beings. The Relationship between them occurs via what is known as irritation events. The mechanism of irritability appears to have a common base in the form of chemical signals, chemicals which are uniform for every cell. Similar compounds likely to be found in living organisms include acetylcholine, dopamine, norepinephrine, epinephrine, serotonin, and histamine, collectively known as neurotransmitters, and have been found not only in animals, but also in plants and microorganisms. Thus, the presence of neurotransmitter compounds has been shown in organisms lacking a nervous system and even in unicellular organisms. Today, we have more and more evidence that neurotransmitters, which participate in synaptic neurotransmission, are multifunctional substances participating in developmental processes of*

192 Lodish, H. et Al. 2007. *Mollecular cell biology*, 6th edition. New York: W. H. Freeman.

193 Cherry, K., 2015, What is a Neurotransmitter [online]. www.verywell.com [cit. 2016]. Dostupné z http://psychology.about.com/od/nindex/g/neurotransmitter.htm.

> *microorganisms, plants, and animals. Moreover, their universal roles as signal and regulatory compounds are supported by studies that examine their role in and across biological kingdoms. Any organism may release neurotransmitters, and due to these secretions the 'living environment' influences every other inhabitant of biocenosis, determining relationships between organisms such as microorganism–microorganism, microorganism–plant, microorganism–animal, plant–animal, plant–plant, and animal–animal. The universal character of their occurrence and similarity of functions at the cellular level should convince scientists to have doubt in the specific name 'neurotransmitters' and exchange it, perhaps, for a more wider term such as 'biomediators' to make it applicable to any living cell, not only organisms with nervous systems.*[194]

I consider the term biomediator, or the related term environmental oscillator[195] as essential for unfolding the overall eco-semiotical context of the psychedelic rhizome. It means to think from within coevolutionary context, and further inquire into the biosemiotic connection leading from the secondary metabolism to neurophysiological processes in human brain. The first step of such inquiry would be to describe the relationship between human neurotransmitters and plant or mushroom alkaloids, called psychedelics. The same questions arise in the background: What is a psychedelic substance? How should it be classified? How ~~do they~~ work to induce the psychedelic effect?

Most contemporary pharmacological studies of psychedelics[196] indicate a close relation between neurotransmitters, especially serotonin, and psychedelics. Yet, the exact nature of this relation remains unresolved. A path towards a sound explanation might relate to the concept of biomediator since biomediation could be the key element in the direct exchange of information, which is apparently the case during a psychedelic experience, between non-human and human organisms. It should be probably accepted that biomediation represents

194 Roshchina, V. V. 2010. *Evolutionary Considerations of Neurotransmitters in Microbial, Plant, and Animal Cells*, in Lyte, M., Primrose Freestone, P. E. 2010, p. 17–18.

195 Aniszewski, T. 2007. p. 90.

196 See for example například Nichols, D. 2004; Karch, S. B. 2008. *Pharmacokinetics and Pharmacodynamics of Abused Drugs.* Boca Raton, FL: Taylor & Francis Group; World Health Organization. 2004. *Neuroscience of psychoactive substance use and dependence*. Geneva: WHO; Halberstadt *et Al*. 2015. *Recent advances in the neuropsychopharmacology of serotonergic hallucinogens*. Behavioural Brain Research. 277C: 99–120; Páleníček, T., Horáček, J. 2008. *Neurobiologie účinků halucinogenů a disociativních anestetik*. Psychiatrie 12 (Suppl. 3): 33–45; and many more.

one of the fundamental processes within the global communication network called semiosphere which encompasses and involves all forms of life in the mutual, but complex and contextual, intertwining.

What is then the possible explanation of the relationship between human neurotransmitters (serotonin, dopamine, or glutamate), and their chemical analogues, psychedelics? The pharmacological action of psychedelics is based on the chemical relation between the molecules of a psychedelic and neuron receptors. There is a wide agreement in pharmacology regarding the fact that "*by definition, all classic psychedelic drugs are agonists at the serotonin 2 A receptors (5-HT$_{2A}$R)…* (and that) *there is a strong positive correlation between a psychedelic's affinity for 5-HT$_{2A}$R receptors and its psychedelic potency*."[197] Serotonin receptors are ringlet shaped structures located in the cell membrane while part of the receptor protrudes from the membrane into the extracellular space thus ensuring communication between the inside and outside of the cell. The extracellular part of the receptor captures free molecules which can bind to it. Binding a molecule to the receptor causes a conformation change in the transport protein and influences the ion flow through the cell membrane thus changing the electric potential of the cell and the function of the respective receptor.

A molecule that binds to a receptor is called a ligand. A ligand can be an agonist (induces physiological reaction after binding to the receptor) or antagonist (blocks the cell's response). The strength of the bond between a receptor and a ligand is called affinity. Majority of hallucinogens show strong affinity with 5HT receptors, but not exclusively. The common interpretation of the pharmacological action of psychedelics claims that they are non-specific antagonists of 5H$_{2A}$ receptors which means that they block their normal function (serotonin transmission) and substitute serotonin's effect. Yet, D. Nichols points out in his article that such interpretation is a simplification untannable against contemporary research. He shows that, on the contrary, in many cases various hallucinogens or related substances work as agonists at the serotonin receptors initializing, instead of blocking the function of serotoninergic system. He asserts that psychedelics are "*5-HT$_{2A}$ receptor-specific molecules that affect membrane potentials, neuronal firing frequencies, and neurotransmitter*

197 Carthart-Harris, R L, Leech, R, Tagliazucchi, E, Hellyer, P J, Chialvo, D R, Feilding, A, Nutt, D., 2014, *The entropic brain: A theory of conscious states informed by neuroimaging research with psychedelic drugs*, Frontiers in Human Neuroscience, Feb. 2014, s. 12.

release in particular areas of the brain "[198]. Therefore, hallucinogenic activity can not be explained simply as activation or deactivation of one type of serotonin receptors[199]. Nichols further claims that serotonin receptors action is not individual, because they form a complex interconnected system situated all around the brain, and in peripheral nervous system. Psychedelics thus do not affect individual neurons, or their receptors, rather, they affect the central serotoninergic function by increasing the amount of serotonin in the system, reducing the level of its main metabolite, and reducing the overall flow rate of serotonin in the brain. He also claims that the serotoninergic system affects the function of other neurotransmitter systems, namely of the dopaminergic and the glutaminergic ones. Moreover, other substances take part in the pharmacological action of psychedelics, such as enzymes.

Hence, the brief biochemical and pharmacological analysis of this chapter designates psychedelics as alkaloids, biomediators, or environmental oscillators. In this respect, psychedelics do not affect exclusively organism, and their effect is not even limited to animalia. They flow through all the kingdoms, plants, animals, and mushrooms alike. They are part of the intertwined co-evolutionary processes and emerge from them in the form of interactive metabolites. The context of their existence is the network of biochemical negotiations and tunings within the co-evolution in the environment. The pharmacological effects of psychedelics can, hence, be interpreted as an entrance into the bio- and eco-semiotic networks that are broader and older than human consciousness. A psychedelic effect might be conceived as a direct chemical link to the circulation of effects ongoing at the sub-organic level of the signal/substance exchange. ~~That~~ our organisms are attuned to the effects of this biomediator alkaloids, that our systems of neurotransmission are open to their action is possible because our bodily processes are already involved in the flow of mixtures and substances which create life.

Entropics, disorganizers, deregulators

The pharmacological and biochemical description can not themselves explain the full scope of a psychedelic effect. It is not enough to describe a mechanism,

198 Nichols, D., 2004, p. 168.

199 There are many types of serotonine receptors, see for example Roth, B. L. 2006. *The Serotonin Receptors. From molecular pharmacology to Human Therapeutics*. Totowa, NJ: Human Press.

an explanation of a function must be added, that is, we must ask about the role that neurotransmission in the workings of the brain plays. The general role of ~~alkaloid~~ is protective and regulatory. Signalling electro-chemical systems permeate entire brain ensuring communication between its individual areas and guaranteeing stability and vital functions of an organism. A disruption of their function can be rightfully seen as poisoning, a disruption of intrinsic equilibrium and normal function of organism. The idea of equilibrium disruption is then the key to a neuroscientific explanation of psychedelic effect.

To enter the brain, molecules of psychedelic substance must first overcome the blood-brain barrier[200]. T. B. Roberts, for example, claims: "*Nevertheless, any attempt to chemically affect neurons in the brain must deal with the blood-brain barrier. This filtering device blocks number of molecules, and lets through only those the brain needs, such as water, oxygen, and glucose*."[201] The blood-brain barrier establishes a biochemical interface between the brain of vertebrates and their vascular system in order to protect the brain from heterogenous substances such as hormones, or alkaloids, thus maintaining a stable brain environment.

There are several mechanisms how to overcome the blood-brain barrier, yet their exact description is not relevant here. Nevertheless, it is quite interesting that some psychedelics such as LSD[202], MDMA[203], or psilocybin can overcome the barrier by themselves, whereas others, typically DMT or bufotenine cannot. M. McBride[204], for example, claims that although bufotenine is as potent and binds to similar receptors as psilocybin, its low hallucinogenic reaction was proven in human trials. The reason of its low toxicity lies in its low ability to

200 Ballabah, P., Braun, A., Nedergaard, M. 2004. *The blood-brain barrier: an overview: structure, regulation, and clinical implications.* Neurobiology of Disease. 16 (1): 1–13.

201 Roberts, T. B. 2013. *The Psychedelic Future of the Mind: How Entheogens Are Enhancing Cognition, Boosting Intelligence and Raising Values*. Rochester/Vermont: Park Street Press, p. 185.

202 Passie, T., Halpern, J. H., Stichtenoth, D. O., Emrich, H. M., Hintzen, A. 2008. *The Pharmacology of Lysergic Acid Diethylamide: A Review*. CNS Neuroscience and Therepeutics. 14: 295–314, s. 300.

203 Rubio-Ariaz, A. a další. 2014, *3,4-Methylenedioxymethamphetamine (MDMA, ecstasy) disrupts blood-brain barrier integrity through a mechanism involving P2X7 receptors*. The International Journal of Neuropsychopharmacology. 17 (8): 1243–55.

204 McBride, M. C. 2000. *Bufotenine: Toward an Understanding of Possible Psychoactive Mechanisms*. Journal of Psychoactive Drugs. 32 (3): 321–331.

disrupt the blood-brain barrier. For the same reason, other ingredients must be added to the powder made of Anadenanthera plants (the source of active bufotenine) since they potentiate the concoction's ability to overcome the barrier. The similar case is ayahuasca or yage, the Amazonian mixture composed of at least two different plants. In one version, it contains the leaves of the bush Psychotria viridis, the source of active psychedelic molecules of DMT, and the trunks of the rainforest liana Banisteriopsis caapi, the source of harmane and harmaline, working as MAO inhibitors. Without the MAO inhibitors, DMT would dissolve in blood before entering the brain but the inhibitors eliminate the function of the monoamine oxidase enzyme causing the dissolution of DMT.

I would like to emphasize the problem of overcoming the blood-brain barrier because it represents the core of the analogy that can elucidate the brain function level of psychedelic effect. Although, the barrier is overcome on the micro level of biochemical processes, it is analogous to the transfer from the normal waking state to the altered one. The violent intrusion of a psychedelic into the "inner sanctum of an organism" can be modelled according to the overcoming of blood-brain barrier. The function of this semi-permeable barrier is to ensure brain's intrinsic stability, and disrupting its function leads to instability, endangering the system by opening it to the effect of external destabilizing agents. Once the barrier is disrupted, the brain is flooded with heterogenous molecules, consequently destabilizing the whole organism. From this perspective, psychedelics might be designated as the blood-barrier overcoming agents, or more generally, as deterritorializing and reterritorializing agents, or also as substances that deregulate the structure of the stable brain territoriality.

To unfold this interpretation in more detail, I will draw on several neuroscientific hypotheses, namely on: 1) the neuronal cascade hypothesis; 2) the deregulation hypothesis; 3) the integrative mode of consciousness hypothesis; 4) the transient hypo-frontality hypothesis; 5) the entropic brain hypothesis. Although this list of possible neuroscientific explanations of psychedelic effect is far from complete, it suffices to give us a glimpse into the neural layer of the psychedelic rhizome.

1) The neuronal cascade hypothesis was formulated by Torres and Repke as follows: "*Although receptor mediated events may be the part of the spectrum of the action of these drugs, it is more likely that they precipitate a series of neurochemical events that might be called a neuronal cascade, in which a specialized and sophisticated sequence of receptor activation/deactivation, neurotransmitter release, pre- and postsynaptic chemical and electrical events, axoplasmic and other cellular transport mechanisms, enzyme activation, and perhaps ion efflux/influx as*

well as other membrane phenomena occur on a specific and well-established (but poorly understood) time scale."[205]

Psychedelic pharmacological action triggers a cascade of events on the neurochemical level, but the cascade does not stop there. Although, the neurochemical networks are partly autonomous systems with the structure and dynamics of their own, their overall meaning lies on a higher level. Neurochemical processes are part of the global self-regulation of an organism. They, together with other systems and processes, contribute to organism's global adaptive strategy, and such strategy is again a part of complex and intertwined self-regulation strategies of an ecosystem. Thus, the neuronal cascade itself is at the beginning of a broader cascade since it turns on processes interlinked on other levels, especially phase transitions between levels. Indeed, the neuronal cascade is followed by the organ, whole body, perceptual, personal, and cultural cascade. Cascade-like feature is, therefore, an essential characteristics of the whole psychedelic domain.

2) As the nature of changes unfolding in cascade-like manner differs at various levels, it also requires diverse types of description. The next question, then, is how to characterize the psychedelic transformation on the level of our central nervous system. According to the deregulation hypothesis, the serotoninergic system regulates global information processing ensuring that the system is not overloaded with too much information. The control it exerts over the signal processing forces the system to focus on immediately pressing matters, on goals an organism considers to be important or inevitable at the given moment. Serotoninergic system regulates the blood flow and the neuronal signalling frequency in such manner as the most of activity is directed towards those areas of the nervous system which are at work during our normal waking states. As psychedelics disrupt regular flows in the neurochemical control systems, they redirect the blood flow and signalling from the higher central control circuits so that these circuits lose control and leave the brain in deregulated state. The fundamental characteristics of a deregulated state is that the normally separated processes begin to mix and intermingle, thus arriving at the integrative mode of consciousness.

3) The integrative mode of consciousness is defined by M. Winkelman as follows: "*The different ritual modifications of consciousness found cross-culturally produce similar brain state characteristics: the production of a synchronized and coherent slow brain wave patterns across the levels of the brain. Shamanistic*

205 Torres, C. M., Repke, D. B. 2006. *Anadenanthera, Visionary Plant of Ancient South America.* New York/London/Oxford: Haworth Herbal Press, p. 165.

practices produce a parasympathetic-dominant state with entrainment of the frontal cortex by highly coherent and synchronized slow-wave discharges originating in the paleomammalian brain structures (limbic brain). These brain wave conditions produce an integration of information processing between the limbic system and lower brain structures, between these areas and the frontal cortex, and between the hemispheres of the cortex; hence the labelling of these conditions as involving the integrative mode of consciousness."[206]

The parasympathetic and sympathetic nervous systems are parts of the autonomic nervous system, a division of the peripheral nervous system. The autonomy of the autonomic nervous system means that it is independent of a direct voluntary control. The sympathetic NS is activated in autonomous actions, for example in reaction to danger, while parasympathetic NS relates, for example, to involuntary relaxation and quieting when organism feels safe. The limbic system is a mediating part of the brain superordinate to the autonomic NS and subordinate to the frontal cortex. It is supposed to be in control of the lower, somatic-vegetative functions, and a functional correlate to emotions and sexuality. Being in a non-integrative mode of consciousness entails that the processes in the lower systems are subjected to rhythms of the higher control processes linked to will and self-awareness. Low frequency rhythms are restrained and accompany voluntary activities working in the background. Contrarily, in a deregulated integrative mode, lower frequencies of the lower brain prevail (Winkelman calls it the parasympathetic dominance), though the higher regulatory functions are not completely disabled, and both levels of activity are synchronized in mutual tuning of deregulated intertwining. In this manner, individual nervous sub-systems lose their specificity and the brain returns to the original unity meaning that the individual rhythms are not organized hierarchically, instead, they are integrated with each other and with the environment in a new way.

D. Nutt[207] explains the mechanism similarly. He asserts that the blood flow and information activity of an average human in the normal waking state is concentrated in the higher parts of the brain – pre-frontal cortex, posterior parietal cortex, and thalamus. He acknowledges the regulatory function of these structures calling them "gate keepers", i.e. transferring and communicatory knots, brain dispatching centres that ensure the proper and safe traffic.

206 Winkelman, M. 2010. *Shamanism. A Biospsychosocial Paradigm of Consciousness and Healing*. Santa Barbara/Denver/Oxford: Prager, p. 1–2.

207 I take this interpretation from the Hockenhull, O. 2013. *Neurons to Nirvana*, Mangusta Productions

Switching them off relates to the changes in blood flow and to the effects of psychedelic molecules on neurotransmission, and it precipitates deregulated reorganization of the entire nervous system.

4) Another explanation of how the brain works during a psychedelic state is the hypofrontality hypothesis formulated by Arne Dietrich[208]. It is again based on the hierarchical model of the brain structure and dynamics, and on the correlation between the brain parts and cognitive functions. Dietrich mentions the neurochemical interpretation of a psychedelic effect based on the serotonin theory and highlights its limitations. According to him, the changes in serotoninergic and dopaminergic systems can not sufficiently explain the psychedelic effect, since it is far more important to indicate what parts of the nervous system are affected then merely describe neurochemical reactions. Dietrich claims: "*While chemical neurotransmission and synaptic changes certainly play an important role in regulation of brain functions and thus consciousness, it is similarly important to understand the function of the neural structure in which the synaptic changes occur. Neuronal cells in a given structure migrated and differentiated according to a genetic code, forming circuits that execute a specific neural computation. A change in the neural structure will alter the way the mind operates in a particular way, regardless of the neurotransmitter the structure evolved to utilize. In other words, brain chemicals work globally and the same neurotransmitter/receptor coupling in one structure will produce a different effect in another structure*."[209] Thus, the theories of drug induced states based solely on neurochemical description are inaccurate and must be completed by the insight of functional neuroanatomy.

The hypofrontality hypothesis draws on the idea that the prefrontal cortex stands of the notional top of the pyramidally structured CNS and is the neural basis for the higher cognitive functions. According to Dietrich, the pre-frontal cortex which is the part of the frontal lobe ~~neither processes nor perceives, has no long-term memory,~~ and its function is to integrate perceptual information, form strategies of behaviour appropriate to a given situation, and instruct the motoric cortex ~~do~~ perform specific programs. Pre-frontal cortex uses a highly differentiated signal produced by lower structures to establish the higher global cognitive functions such as: self-awareness, self-conception, complex social functions, abstract thinking, voluntary action, theory of mind, temporal

208 Dietrich, A. 2003. *Functional neuroanatomy of altered states of consciousness: The transient hypoftrontality hypothesis*. Consciousness and Cognition. 12 (2) : 231–256.

209 Ibid., p. 248.

integration, lasting intentional attention, and the internal memory. These global functions elevate cognitive flexibility and evoke a united personal experience, whereas the pre-frontal cortex is not an exclusive ruler of the system. A fully developed normal human consciousness is the function of a fully integrated brain, whose all parts are working properly, that is when every brain structure contributes to the overall functionality. The pre-frontal cortex neurons ensure the highest control functions in the sense that they utilize the outcomes of the lower levels and transform them in the above described manner.

According to Dietrich, altered modes of experience, including dreaming, runner's high, meditation, hypnosis, daydreaming, or drug induced states are all consequences of the temporal pre-frontal deregulation. Inhibition of pre--frontal functions under psychedelics goes together with the higher intensity of lower functions, and with the permeation of the lower and higher in a new configuration. Psychedelic phenomena, such as time distortion, disintegration of self-awareness, dream-like trance, lack of cognitive flexibility, etc. are then typical outcomes of such deregulation.

5) The last version of the brain deregulation theory is the entropic brain hypothesis[210]. It is also based on the analogy of CNS and cognitive functions. In short, the entropy hypothesis claims that psychedelic experiences are the consequence of the increased entropy of the brain. A particularly interesting outcome of this hypothesis is that it leads to a completely different conclusion regarding the altered states than the hypothesis of hypofrontality. Dietrich's theory asserts that psychedelics deprive the neural-cognitive system of the global uniting function decreasing the cognitive flexibility, i.e., the ability to deliberate, judge, adapt to a situation, plan, and keep the integrity of experience, as a result. That is why, he does not speak about extended but about narrowed consciousness. Such interpretation draws on the assumption that to eliminate the integrative function of the "higher self" is, in the end, a disadvantage. Although this interpretation is valid, it is not the only one.

The authors of the entropy hypothesis build on the assumption that specific brain areas correlate with analogical parts of cognitive systems. Carthart--Harris and his colleagues found their explanation of psychedelic experiences on the functional structure in the brain known as the Default Mode Network (DMN). It lies in the central area of the brain and connects the lower/older and higher/younger brain areas. According to their explanation, it includes the

210 Carthart-Harris, R. L., Leech, R., Tagliazucchi, E., Hellyer, P. J., Chialvo, D. R., Feilding, A., & Nutt, D. 2014. The entropic brain: A theory of conscious states informed by neuroimaging research with psychedelic drugs. *Frontiers in Human Neuroscience*, 1–64.

following brain systems: medial temporal lobe, medial pre-frontal cortex, part of the limbic system (posterior cingulate cortex), and parietal cortex. Compared to other brain areas, the blood flow and energy consumption is highest in the DMN (about 40% more). The DMN is not directly connected to the outside orientated cognitive processes of the upper cortex, which means that it is not involved in immediate perception and recognition of environment, yet its blood flow is still the highest.

The obvious question is why. Regarding that the DMN is composed of the brain areas with increased connectivity, this network is a cluster of connecting nodes working as a "dispatching centre," whose function is to unite and integrate the brain activity. The level of the blood flow and energy consumption in the brain is caused by endogenous processes, such as the activity of brain stem cores, for example the serotonin core. Cognitive functions corresponding to the central regulatory function of the DMN are higher level meta-cognitive operations such self-awareness, theory of mind, time function, and others, that is, an identical function which Dietrich relates with the prefrontal cortex. One of the pillars of the entropy hypothesis is the claim that "*the function of DMN is actually the physical antipode of the narrative self or the ego*."[211] According to Carthart-Harris et al., the DMN develops during ontogenesis correspondingly to the development of the stable self-conception, that is, between the ninth and twelfth year of age.

The explanation of what DMN's means for altered states is based on the difference between the primary and secondary states of mind. The primary states are altered states such as REM sleep, incipient psychosis, or psychedelic experiences. Characteristic features of these states are the absence of the ego control and asynchronous, chaotic and abnormal organization of experiential content. Primary consciousness is unstable or metastable, and, according to the authors, it shows an increased degree of entropy. The primary states are borderline, they occur at the edge between the awake presence and unconsciousness, between activity and passivity, between ego control and its absence, and they are highly entropic, meaning disorganized and messy. The primary states include experiences which are neither oriented outside, nor controlled by ego. These experiences lack unity, and their parts, states, and processes mix together freely, while the global regulatory mechanisms are temporarily disabled.

The traditional example of a primary state is the type of psychosis designated as schizophrenia. In this context, J. Kounen states: "*I don't know, I have mixed opinions about schizophrenia. I compare taking ayahuasca to*

211 Ibid., p. 15.

a transcendental schizophrenic stage: schizophrenia for me, a priori, is a state of knowledge. The person can be divorced from reality, but this individual has no guide, and so becomes dangerous to herself and to others. But a schizophrenic can be initiated. Just what is schizophrenia? It is when the different parts of our personality are no longer connected. When you take ayahuasca… my personality, my identity fractures. Out of this fracture, identity dies and is reborn.[212]

Psychedelics are also psychotomimetics, substances supposedly inducing states similar to psychosis, primary states when the self-reflecting, united self returns back to its unformed phase, paradoxically finding itself beyond the chaos/order division. A fully developed psychedelic experience brings a person exactly to the point of fragmentation, disintegration, symbolic death of the central subject when self-awareness retires from the realm of apparent, visible and controllable surfaces into the all encompassing relational network from which it originally emerged.

The DMN develops gradually during the growth and maturation of personality. Immature child brain has not yet developed the firm structure of stable behaviour. Individual parts of a child's organism cannot cooperate properly, the unorderly embryonic urge to live only gradually crystalizes and the fundamental functional settings and connections are being established. An organism organizes itself relatively to its environment in the manner that its actions are ideally directed towards its own preservation. Higher, unitive cognitive functions correlative to the DMN, and designated as secondary consciousness. They emerge gradually together with the stabilization and normalisation of learned patterns, as the dispatching centres of the default network gain control over the information flow. The purpose of meta-cognitive, integrative functions is to keep the system in sub-critical, non-primary state.

According to the entropy model, psychedelic experiences are explained as follows. The basic assumption says that "*the brain self-organizes under normal conditions into transiently stable spatiotemporal configurations, and that this instability is maximal at a point where the global system is critically poised in a transition zone between order and chaos*."[213] The phase transition between the primary and secondary consciousness can be induced by destablizing the function of the higher level association networks. The results of their measurements

212 Narby, J., Kounen, J., Ravalec, V. 2010. *The Psychotropic Mind. The World according to Ayahuasca, Iboga, and Shamanism.* Rochester/Toronto: Park Street Press, s. 98.

213 Carthart-Harris et Al. 2014. p. 24–25.

using the data from BOLD fMRI with psilocybin "*imply that the activity of high-level networks becomes relatively disorganized under psilocybin, consistently with the entropic brain hypothesis*."[214] Increased disorganisation caused mainly by the change in the brain oscillatory frequencies results in increased entropy, and brings the system closer to the critical point of phase transition.

The regulatory and connective function of the higher association network is reduced during a psychedelic experience, the neurochemical level undergoes substantial changes (mainly the change in the neuronal firing frequency, and other phenomena), the oscillatory frequencies that help to keep the brain in balance are in disarray, and the whole process results, on the phenomenal level, in the disruption of the ego conception, confusion, hypertrophy of individual cognitive processes, etc. From this perspective, we could even say that A. Dietrich was right when substituting the term extended (or expanded) consciousness with the term narrowed since in a certain important respect, psychedelic states are in fact states of disorientation when one cannot identify usual reality, comprehend oneself, or act efficiently. However, the authors of the entropic brain hypothesis propose that "*primary consciousness rests on more metastable dynamics than secondary consciousness, i.e. brain sub-states are less stable in primary consciousness and so more transient. Thus, by implication, a broader repertoire of transient states may be visited in primary consciousness because the system is closer to criticality-proper. Moreover, it is the ability of psychedelics to disrupt stereotyped patterns of thought and behaviour by disintegrating the patterns of activity upon which they rest that counts for their therapeutic potential. This principle implies that a brain at criticality may be a happier brain*."[215] Thus, the ability to return to the primary states of mind, go back to dysregulated activity lacking global control, might be, under certain circumstances, even advantageous for an organism. But it obviously depends on many other factors and on other contexts, namely on the personal and sociocultural. Nevertheless, we could, from the neuroscientific point of view, consider M. Winkelman's hypothesis of integrative mode according to which deregulation and increased entropy does not mean that the lower autonomic systems take over, rather, it means synchronization and a new tuning of the whole brain, or to put in J. Kounen's words, the birth of a new identity.

Carthart-Harris and colleagues show that a temporary reduction of the DMN rule might have a positive effect, for example on patients suffering

214 Ibid., p. 25.

215 Ibid., p. 25.

from depression. They claim that "*cognition during an episode of depression is characteristically inflexible; patient's focus is almost entirely inward and self--critical. Depressed patients typically perceived themselves and their world through an unyielding pessimism. Depressed patient's cognitive style may become too fixed, such that the patient loses the ability to think and behave in a flexible manner. Underlying this phenomenon may be a decrease in metastability, such that one particular state, e.g. the introspective default-mode, comes to dominate cognition*."[216] In other words, a depressive patient is caught in a loop affecting his thinking, emotions, even perception, covering everything in despair. A depressive person is unable to break throught the crippling loop of a too stable mode, and only a radical rupture of the cognitive style may help. The metastable state, close to the critical situation such as a psychedelic experience offers, if properly guided and administered, is an opportunity to change system's settings, reorganize and purify stuck circuits and, in an ideal case, to establish a new, more flexible DMN.

The above exposition of psychedelic rhizome's neuroscientific level suggest several terms to consider. Carthart-Harris and colleagues claim that their studies provide "*some useful clues about the mechanism by which psychedelics alter brain function to alter consciousness. They imply that cerebral blood flow, BOLD signal, functional connectivity, and oscillatory power are decreased in brain regions that are normally highly metabolically active, functionally connected and synchronous/organized in their activity. These results provided the kernel for our subsequent thinking about increased entropy in the psychedelic state… and spoke to a general principle that psychedelics alters consciousness by disorganizing brain activity*."[217] Therefore, psychedelics can be designated as entropics, disorganizers, or deregulators, but simultaneously as integrators, or re-integrators. These names pertain to the neural level of psychedelic rhizome.

Psychedelics

So far, names given to the substances in question are neither neutral, nor objective. Each term relates to a specific explanatory context. A name is constituted on the respective level of description which is imbued with the perspective. Defining psychedelics as alkaloids, neurotransmitters, or neural deregulators and re-integrators is based on the advanced system of scientific research. The same principle must be applied to any term we decide to use, especially to the

216 Ibid., p. 27.

217 Ibid., p. 14.

popular ones such as hallucinogens, psychotomimetics, or entheogens. Each term is bound to an interpretation, is culturally relative and implies specific type of praxis.

The term I consider to be fundamental in this text is psychedelics. Lee and Schlain comment on its origin as follows:

> *Originally researchers viewed LSD solely in terms of its ability to create an experimental toxic psychosis. LSD experience was synonymous with LSD psychosis. This frame of reference uniformly shared by scientists at the outset of the 1950s was typified by the comment of a CIA agent involved in the MK--ULTRA program: 'Tripping and psychosis are one and the same. Tripping can be an awful schizoid feeling. Also, there are hebephrenics – happy shizos. Their experience is similar to a good trip.'*
>
> *After meeting captain Hubbard, a small circle of researchers based in Saskatchewan broke with the psychotomimetic definition and started exploring new directions. Dr. Osmond noticed a significant discrepancy between the usual description of the drug experience as a close encounter with lunacy and the kinds of experiences reported by his patients when they were given LSD for their alcoholic problems. They often spoke of an LSD session as insightful and rewarding. As the research at the Weyburn hospital progressed, it became apparent to Osmond and his cohorts that most people who took LSD did not become insane.*
>
> *The terminology used to describe LSD experiences in the scientific literature did not sit well with Osmond. Word like hallucination or psychosis were loaded; they implied negative states of mind. The psychiatric jargon reflected a pathological orientation, whereas a truly objective science would not impose value judgments on chemicals that produced unusual or altered states of consciousness. A. Huxley also felt that the language of pathology was inadequate. He and Osmond agreed that a new word had to be invented to encompass the full range of effects of these drugs*.[218]

In the correspondence between Osmond and Huxley, the following rhymings arose that coined the word psychedelic. First, Huxley, in one of his letters, proposed the term phanerotyme: "*To make this trivial world sublime, take half a gram of phanerotyme*." Then Osmond replied with the word psychedelic: "*To fathom hell or soar angelic, just take a pinch of psychedelic*."

218 Lee, M., A., Shlain, B. 1985. *Acid Dreams. The complete history of LSD: The CIA, The Sixties and Beyond.* New York: Grove Press, p. 50.

Both authors decided to create a neologism that would not be loaded with the negative psychiatric interpretation and would more adequately express the range and possibilities of LSD experiences. The term phanerotyme is composed of the ancient Greek words *phaneros* (apparent, visible, manifest) and *thymos* (bravery, soul, soulful, passion). Plato, in *Phaedrus* and in *Republic*, divides the soul in three parts, one of them, the emotional and passionate one, is *thymos*. Phanerotyme, then, is an agent that makes the passionate (autonomic, even vegetative, also emotional, pre-conscious) part of the soul manifest itself. Similarly, the Osmond's term, which sounds undoubtedly more familiar and is more general, is composed of Greek words *psyche* (soul, mind) and *deloun* (apparent, manifest, evident, declared), and has the same meaning.

What does it mean to make the soul manifest itself? Is that not the case that soul (mind, experience in general) is manifested by definition? Is it even possible to make the mind more apparent than it already is in every act of its self--appearing? As a psychiatrist, Osmond certainly had in mind the manifestation of subconsciousness, e.g. an appearance of things and processes hidden beyond normally accessible phenomena which must have led him to the assumption that "*LSD could be a valuable tool for psychotherapy*."[219]

To describe the self-appearing aspect of experience I choose the term transparency. In this context, transparency does not imply a kind of invisibility of our milieu (the process of experience is invisible in itself until we focus on it in the phenomenological manner), but the visibility of the invisible processes and relations underlying our normal experience. In normal waking state, attention is directed towards acting in given situation, towards the present aspect of the outside world. But during psychedelic inebriation, which can be described as a wild phenomenological epoche, experience turns inwards, the invisible becomes visible, latent becomes manifest. The transparency of psychedelic experience is twofold. On one hand the psychedelic manifests our inner arrangement, intrinsic dynamics of our cognitive processes, and the architecture of the psychic system. On the other hand, it reaches beyond the self and manifests our entanglement with the world, makes our negotiating intertwinement with the world apparent. A more precise description of the process of such manifestation can be achieved only through a careful analysis of the very psychedelic experiences and is presented in the following chapter.

Here, I will only give a brief and general account of the insights that psychedelics may shed on experience. The entire process begins with the phase of deregulation, disintegration, or, to put in Deleuzian terms, deteritorialization

219 Ibid, p. 51.

of the experiential field. This phase includes blurring and simultaneously singling out the perceptual modalities, permeation of individual cognitive levels, disintegration of ego, explosion of emotions, and an unconstrained inrush of subconscious motives rooted in the dismantling of the established biochemical and neurophysiological rhythms.

The phase of fragmentation and disarray is followed by a gradually growing wave-like tide of intensification, which includes a growing feeling of power and liveliness, feeling of excessiveness and overwhelming upsurge, accompanied by a strong feeling of vibrations permeating the whole experiential field. Individual cognitive processes are intensified up to their limits until they burst into the hallucinatory field. Paradoxically, in the situation when our perceptions, emotions and physical feelings do not work as usual, when everything mixes up in a wild concoction lacking the central referential point of the self, a distance, even alienation from the very experience arises. On one hand, the subject of the experience disappears and gets lost in the ravings of intoxication; on the other hand, one acquires an awkward kind of distance. A person intoxicated by a psychedelic usually knows what is happening to her (depending on the dose), since there is a certain unavoidable and sometimes unbearable clarity to the whole process; yet at the same time, the growing feeling of alienation grows ~~makes~~ you feel as if it was not you, as if the experience did something with you or through you while relieving you of any control over it. This kind of paradoxically involved distance establishes the transparency of the psychedelic process.

The entire process climaxes in a complete transient re-territorialisation, which includes expansion of the feeling of interconnectedness with the world, and disappearance of the boundary between inner and outer, subjective and objective, self and the world. The original dual consciousness is suppressed for the benefit of a unitary consciousness of an irrevocable involvement within the raw, undivided being. The intoxicated person feels overpowered, overruled, even annihilated by the context which allows it to exist; ~~He~~ or she is mercilessly confronted with the boundaries of the personal existence, goes beyond these boundaries and dives into the stream of primary consciousness.

When contemplating the meaning of the word psychedelic, its other contexts cannot be overlooked. Psychedelic effect permeates all the layers of psychedelic rhizome up to the political, or more generally the socio-cultural one. The discussion of the socio-cultural level of psychedelics may begin with the events happening from the 1940's to 1960's. Until the end of the second world war, research and experimentation with psychedelics (from opium and hashish to psilocybin and mescaline) had concerned only few elite chemists, biologists, physicians, writers, and artists. The invention of psychedelic properties of

LSD[220] and the chemical synthesis of psilocybin in 1943 brought about a radical change. Industrial production of ~~LDS~~ spread all around the world, literally to everyone who asked for it[221]. In the 1950s, an intensive pharmacological and psychiatric research commenced, and specialized scientific institutions started to distribute psychedelics to universities in the USA, Canada, Germany, UK, and elsewhere. LSD was also used in military research, including the Czechoslovak army[222]. Secret services led by the CIA and its MK-ULTRA[223] program showed imminent interest in exploring these substances. In the 1960s, psychedelics spread among university student and teachers, and in quickly penetrated the public space. Thanks to the so-called Harvard psychedelic club[224] they also spread within higher social classes and started to be discussed in mass media. Then, the Marry Pranksters[225] led by Ken Kessey appeared, Grateful Dead[226] organized their famous hallucinatory concerts, or A. Warhol's Factory[227] was operational. Psychedelics entered the mass culture through magazines and newspapers, music, film, and literature. All of this was happening in the years of a great social and political upheaval, social and political protests both in the USA and Europe, and psychedelics were bound to become a political problem. R. Nixon's War on Drugs policy in combination with some negative phenomena such as Ch. Manson's Family[228] or Unabomber's attacks[229] forced psychedelics

220 Hofmann, A. 1971. *The Discovery of LSD and Subsequent Investigations on Naturally Occuring Hallucinogens*. in Ayd, F., J., Blackwell, B., eds. 1971. *Discoveries in Biological Psychiatry.* Philadelphia/Toronto: J. B. Lippincott Company.

221 When Hubbard heard about LSD in early 1955, he called up Sandoz and requested forty-three cases, which Sandoz promptly shipped. See Stevens, J. 1987. *Storming Heaven. LSD & The American Dream*. New York: Grove Press, p. 46.

222 Křemen, P. 2015. *LSD made in ČSSR*. Praha: Česká Televize.

223 Black, D. 1998. *Acid: The Secret History of LSD*. London: Vision.

224 Lattin, D. 2010. *The Harvard Psychedelic Club.* New York: HarperOne.

225 Wolfe, T. 1969/1999. *The Electric Kool-Aid Acid Test.* New York: Bantam Books.

226 Rätsch, Ch. 1993. *50 Jahre LSD-Erfahrung. Eine Jubiläumsshrift.* Solothurn/Löhrbach: Nachtschatten Verlag/Pieper's Medienexperimente, p. 41–44

227 Lee, M., A., Shlain, B. 1994. p. 85.

228 Faith, K. 2001. *The Long Prison Journey of Leslie Van Houten. Life Beyond the Cult*. Boston: Northeastern University Press.

229 Dammbeck, L. 2005. *Das Netz – die Konstruktion des Unabombers.* Hamburg: Edition Nautilus.

out of the legal zone, and all scientific research, beside a few exceptions, was brought to a halt until recently.

Yet, the influence of psychedelics did not fade away regardless the official prohibitionist approach. Besides the illegal and underground activities, psychedelic praxis found its continuation in the renewed and intensive interest in self-exploration techniques:

> *The second half of the twentieth century has seen an extraordinary renaissance of interest in the exploration of human consciousness. Its most dramatic and widely publicized expression were clinical research with psychedelics, conducted during the 1950s and 1960s in many countries of the world, and unsupervised self--experimentation with these remarkable agents. After drastic administrative and legal restrictions terminated scientific experimentation with psychedelics, deep self-exploration has continued in the form of new powerful forms of non-drug experiential psychotherapy, such as various neo-Reichian approaches, hypnosis, primal therapy, rebirthing, and holotropic breathwork. Laboratory research contributed the methods of sensory deprivation, biofeedback, lucid dreaming, and the use of various electronic entrainment devices. The work with patients dying of terminal diseases and the study of the states of consciousness emerging in near-death situations gave birth to a new scientific discipline – thanatology. Careful systematic investigation of spontaneous past life experiences in children and of past life experiences induced in adults by a variety of methods made it possible to subject to scientific scrutiny the concept of reincarnation and karma. The Zeitgeist of this era also brought great enthusiasm for the study of shamanism, the ritual life of aboriginal cultures, the spiritual philosophies of the East, and the mysticism of all countries and ages.*[230]

The above presented list of important social, cultural, and political events, however brief and condensed, suggests how broad the socio-cultural effect of psychedelic experiences can be. It is, at the very least, remarkable that since the second half of the twentieth century, psychedelics have penetrated such a wide scale of socio-cultural processes, including science, art, military and secret services, entertainment, law, or education. Poetically speaking, modern society is soaked in drugs in so many aspects, and they assisted in revealing its cracks, disturbing social climate, or nurturing global counter-culture. Even under prohibition, psychedelics have continued to live a rich life occupying the border zone between criminality, science, insanity, and wisdom.

Theoretical psychonauts must, in this respect, consider several important questions: How come that the western culture of the twentieth and the twenty

230 Grof, S. 2000. *Foreword*. in Bache, Ch. M. 2000, s. ix.

first century is permeated with drugs to such an extent? How come that even despite the prohibition and active anti-drug actions psychedelics still attract new users? How to explain their attractivity in face of the fact that they are in fact poisons causing temporary deregulation and inability to act normally? Or, to put in a more general way, what is hidden behind psychedelic's ability to influence and co-form culture? Why does the psychedelic rhizome have the socio-cultural level and what does it entail?

We believe that psychedelic experience, as any other kind of experience, is primarily subjective. But from this text's perspective every experience makes sense only in a context. If the experience is powerful enough, it resonates through society, attracts others who want to share it, spreads in the society and induces social reactions in the form of regulation or ritualization of the psychedelic praxis. The experiential patterns linked to the psychedelic use are quite variable, but one of the decisive aspects represents the pattern of transgression. Through psychedelics, it is possible to transgress the boundaries of the waking mode of consciousness and overcome the barrier of everyday habituality. The patterns of our lives composed of our movements, of meetings with others in cooperation or competition, our eating and defecating, things we consume and create, work and leisure, love and hate, suffering and pleasure, etc., are not static, but dynamic. Yet tend to follow necessary repetition of regular rhythms, thus forming a structured and stable territory. Psychedelics, or drugs in general, come to the fore when our territory is shattered, when there is a need for its reorganization.

A territory is relative to: 1) species – different organisms have different territoriality; 2) environment – every environment requires diverse types of behaviour in order to survive; 3) social group – the habitual patterns are formed as co-habitual with those we share the world with; 4) individual – common shared world is composed of the varying individual trajectories. The distribution of any behavioural pattern must always conform with already established biological, environmental, social, and individual patterns, with so called normality. But when considering the transgression pattern, the pattern of seeking abnormal experiences, seeing it as an opposite of normality would not be precisely accurate. In fact, the normal and abnormal are not opposites but counterparts. Abnormal, unsafe, or disturbing experiences are never absent from the course of our everyday lives. They always burble under the surface of everydayness constituting its integral part and revealing its boundaries. Dreaming, insanity, unconsciousness, sexual ecstasy, inebriation, violence, and death are universal, and always accompany our waking activities. They can be seen, to speak metaphorically, as hidden but always present dark wood, as a counterpart to the illuminated and guarded space of human dwellings.

Each society must deal with the difference and relation between the domain of day and that of night, and the solution to the problem can be called "contract with consciousness". Such contract is radically different for the Yanomami forest tribes in Amazonia, a traditional island culture on Bali, western society in 1950s and 1960s, or the globalized post-industrial society today. For example, the psychedelic boom of 1960s was directly connected the confrontational, revolutionary, and counter-cultural ~~attitude~~ of the radicalized social segments. Contemporary psychedelic renaissance, on the other hand, chose the path of social integration, public education, and institutional research to evaluate the possibilities of altered states properly and without focusing on conflicts.

Therefore, the concept of psychedelics is composed of at least two layers. The first, philosophical one, pertains to the phenomenon of transparency, and was formulated as an antipode to the pathologizing psychiatric interpretation. This meaning also implies a positive interpretation linked to the therapeutic and cognitive benefit. The second, socio-cultural one, pertains to the cultural and political development of the rich industrial societies of the North in the second half of the twentieth century.

Hallucinogens

Hallucinogen is another relevant term that deserves consideration. The Online Etymology Dictionary presents the etymology of the verb *to hallucinate* as follows:

> "*to have ilusions, from Latin* alucinatus *(later* hallucinatus*), past participle of* alucinari*, wander (in the mind), dream, talk unreasonably, ramble in thought, probably from Greek* allyein*, Attic* halyein*, also wander in mind, be at a loss, be beside oneself (with grief, joy, perplexity), be distraught; also wander about, which probably is related to* alaomai *– wander about. The Latin ending probably was influenced by* vaticinari *– to prophecy, also to rave*."[231]

The word with such etymology has appeared in the English language in the sixteenth century in the frame of the Galenian medicine[232]. In the nineteenth

231 Hallucinate (v.) [online]. Online ethymological dictionary, www.ethymonline.com [cit. 2016]. Dostupné z http://www.etymonline.com/index.php?term=hallucinate.

232 Sarbin, T. R. 1990. *Metaphors of unwanted conduct: a historical sketch*. in Leary, D. E. 1990. Metaphores in the History of Psychology. New York/Cambridge/Oakley: Cambridge University Press, p. 134.

century, it was chosen as a general term to designate certain psychiatric phenomena. G. E. Berrios assigns its introduction to French to the psychiatrist J-E. E. Esquirol:

> *In 1817, Esquirol brought these phenomena under the common term 'hallucination' thereby introducing the false view that hallucinations affecting the various sense modalities were somehow symmetrical and uniform. Furthermore, by choosing a word whose etymology was, at the time, linked to vision, he generalized a restricted model of perception (the one entailed by seeing as the capture of public stimulus) to other sense modalities. Five Esquirol cases had visual hallucinations. 'If a man has the intimate conviction of actually perceiving a sensation for which there is no external object, he is in hallucinated state: he is a visionary. Hallucinations of vision… have been called visions but this term is appropriate only for one perceptual mode. Who would want to talk about auditory visions, taste visions, olfactory visions? However, the functional alterations, brain mechanims and the clinical context involved in these three senses is the same as in visions. A generic term is needed. I propose the word hallucination'. In regard to mechanims, Esquirol wrote: 'there is a form of delusion that makes subjects believe they are perceiving a sensation in one or more modalities when, in fact, there is no stimulus. In hallucinations there is no more sensation or perception than in dreaming or somnambulism, when no external object is stimulating the senses. In fact, hallucination is a cerebral or psychological phenomenon that takes place independently form the senses'.*[233]

Hence, hallucination was defined by psychiatry as an illusory perception that lacks the object perceived, or the stimulus that would produce it. A psychonautic definition of a hallucinogen would then be wider, drawing from the etymology of the word. The preliminary definition of hallucinogen assumes that it is a substance inducing a state during which a raving subject wanders in its own mind being somehow beside oneself, and beside what can be objectively perceived, being beyond common sense experience, on the threshold between prophecy and illusion. Many psychologists still hold on to the original Esquirel's definition such as O. Sacks who asserts that "*generally hallucinations are defined as a percepts arising in the absence of any external reality – seeing things or hearing things that are not there*."[234] Only that Esquirel, besides saying that hallucination is something like an erroneous perception since there is nothing to be perceived, also states that it unfolds independently of the sense and therefore

233 Berrios, G. E. 1996. *The History of Mental Symptoms. Descriptive psychopathology since the nineteenth century.* New York: Cambridge University Press, p. 37.

234 Sacks, O. 2012. Hallucinations. New York/Toronto: Alfred A. Knopf, p. 12.

it is no perception at all. The complexity of the relationship between illusion, hallucination and misperception, as stressed by O. Sacks, becomes apparent if we consider how diverse types of hallucinations exist. Even if we consider psychedelic hallucinations as the only type of hallucinations, the situation will not be much better as there is a whole scale of psychedelic hallucinations.

Regarding psychedelics, Sacks uses the word pseudo-hallucination for experiences such as imaginary visions behind closed eyes, or perceived imaginary sounds without any music playing. These are, according to him, not proper hallucinations since they only appear to the inner eye or ear. Then, there are direct sensory ~~transformation~~ that could be called hallucinatory, but they do not unfold in the absence of a perceived object, rather the usual perception is enriched, transformed and expands in the way that one perceives things that cannot be perceived in a normal state. And there are also phenomena that I would call supra-sensory hallucinations which are neither inner images, nor expanded perceptions but experiences of non-existing dimensions, spaces, and beings that are beyond what can be normally imagined or described.

Moreover, within the chaos of psychedelic state, it is much more difficult to distinguish between an illusion, misperception and hallucination due to the permeation and mixture of normally distinct cognitive states. Sensory perceptions often turn to be synesthetic, and simultaneously they mix with overexcited emotions and unusually clear and wide thinking, all accompanied by the strange extra-sensory feelings bordering on bodily sensation and linguistic expression (talking emotions). Psychedelic hallucinations also fundamentally differ from the psychiatric ones, e.g. from the parkinsonic hallucinations which appear within a normal waking state as a sudden, surprising event disrupting the normal course of experience whereas psychedelics states are always a part of chemically induced alteration of the whole experiential field. Nevertheless, both types are caused by a change in the brain functioning and can be, thus, interpreted as a transfer into the primary consciousness, into the chaotic, dis-coordinated pre-subjective state when our experience is no longer under control of one ego-centre, and reveals the unorganized intertwining of rhythms and directions interwoven within the wider ecosemiotic network of signals.

Psychedelics allow to "wander in mind", while hallucinogens induce such experiences that flood a subject's mind in the manner that it is impossible to control its content, or to stop the incoming stream of phenomena. The psychiatric tradition interprets hallucinations as erroneous or abnormal states of mind compared to the normal waking one. But a psychonautic interpretation asserts that normal experiences should be on the contrary contrasted to the anomolous ones since hallucionations can be interpreted as the proof that

extent and possibilities of our consciousness transcend a narrowed modality of the functional waking state[235]. Therefore, I do not conceive of psychedelic hallucinatory states as some sort of cognitive mistakes, but as the consequence of temporary reorganization of centrally controled neurotransmission. Such reorganization implies opening the wider, "primary" consciousness that is not bound to self-preservation in a stable milieu and allows us to acknowledge our wider situatedness in the world which is beyond the reach of our common abilities. In a hallucinatory state, as I propose, we delve into the network of pre-subjective being where one ceases to be the a separated autonomous subject and turns into a pulsating knot, a transformatory and connective centre that incessantly rearragnes incoming signal flows turning them into its own broadcasts. Dreams, illusions, hallucinations, ravings, preconceptions, déjà vu, and many other abnormal experiences thus prove that we are directly involved in older and wider levels of the world than those accessible in waking awareness.

So, I personally have no objections against the term hallucinogen if interpreted properly. Nevertheless, many authors find it unsatisfactory due to the prevailing psychiatric interpretation. R. Metzner for example states: "*The older term hallucinogenic was universally rejected by those investigators, who had actually experienced these substances, since it was clear that they do not cause one to see hallucinations in the sense of illusions: rather one sees all the ordinary objects of the sense world plus the whole range of energies and phenomena normally not seen*."[236] Similar objection against the terms hallucinogens, as well as psychedelics was expressed by B. Shanon as follows: "*In the literature agents such as Ayahuasca are referred to by different epithets – notably: psychoactive, psychotropic, psychedelic, hallucinogenic, psychotomimetic, and psychotogenic. Of these terms, I prefer the first, which is the most neutral. Etymologically, the term psychedelic is just fine, yet sociologically, I find, it is too linked with the New Age culture and therefore I prefer not to use it. The term hallucinogenic is problematic in two respects. First, whiled the generation of hallucinations is a major effect of Ayahuasca, surely it is not the only one. The second reason for my not opting for the term hallucinogenic is that it often carries with it derogatory connotations. In particular, in the clinical literature, hallucinations are regarded as perceptual perturbations that reflect a malfunctioning of the brain and/or mind. This value*

235 See Schroll, M.A., Greenwood, S. 2011. *Worldviews in Collision, Worldviews in Metamorphosis: Towards a Multistate Paradigm*, Anthropology of Consciousness. 22 (1): 49–60.

236 Metzner, R. 2004. *Teonanácatl. Sacred Mushrooms of visions. A sourcebook on the psilocybin mushrooms*. Rochester: Park Street Press, p. 4.

judgement does not reflect the attitudes held by responsible users of Ayahuasca, traditional and syncretic alike – for them, the brew is taken in order to increase one's sensibilities, not to diminish them."[237]

Beyond naming: phantastica, psychotomimetics and Shulgin's scale

There are yet other names beside psychedelics and hallucinogens aspiring to be a general title four the group of substances studied in this text. I have already mentioned Phanerotymes, the term which has never been really used, yet there are other, more popular aspirants: phantastica, psychotomimetics, psychotogens[238], psycholytics[239], psychodysleptics[240], mysticomimetics[241], entheogens, etc. Also, other widely used names should not be forgotten; they designate ~~not~~ the group in general but just one specific aspect of experience shared by more psychedelic substances, such as empathogens, entactogens, oneirogens[242], deliriants[243], dissociatives, etc. The largest group of terms comes from the context of a lay, non-theoretical language in both pre- and modern cultures and comprises popular taxonomies and worldviews[244]. These taxonomies contain names of individual plants, substances or mixtures, together with more general expressions, such as plant teachers, sacred plants, trips, etc. Finally, a group of

237 Shanon, B. 2002, p. 28.

238 Preedy, V. 2016. *Neuropathology of Drug Addictions and Substance Misuse. Volume 3*. London/San Diego/Cambridge/Oxford: Academic Press, p. 50.

239 See Fischer, F. M. 2015. *Therapy with Substance. Psycholytic Psychotherapy in the Twenty-First Century*, London: Muswell Hill Press.

240 Fischer, G., Joyce, M. *The Psychotherapeutic Use of Psychodysleptic Drugs* [online]. The Albert Hofmann Foundation [cit. 2016]. Dostupné z http://www.hofmann.org/papers/fisher/fisher_1.htm.

241 Richards, W. A. 2016. *Sacred Knowledge. Psychedelics and Religious Experiences*. New York: Columbia University Press.

242 Toro, G., Benjamin, T. 2007. Drugs of Dreaming. Rochester: Park Street Press.

243 Duncan, D. F., and Gold, R. S. 1982. *Drugs and the Whole Person.* New York: John Wiley & Sons.

244 This area is too wide, but Ch. Rätsch (2005) provides an extensive overview with over eighty ley terms only for Datura such us cojón del diablo, herbe aux sorciers, chosen asago, stink weed, or teufelsapfel.

higher level terms should be mentioned. They ~~that~~ designate a wider group of substances than just psychedelics, but they are nevertheless important in our current discourse, such as drugs, ~~psychoactive~~ or psychotropic substances.

One of the less known yet well chosen names is the word phantastica. Autonomous and often surprising products of imagination (or phantasy) constitute undoubtedly one of the key aspects of psychedelic experience. The term was invented by the German pharmacist, physician, and toxicologist L. Lewin[245] in 1927 when the first systematic classification of so called narcotic drugs was published. Lewin and his wife travelled through Canada and United States and brought to Europe one of the first specimen of the cactus Lophophora Williamsii, the famous peyote containing alkaloid mescaline. Lewin synthesized and analyzed it, together with many other narcotics, and was fascinated by the fact that narcotics can overcome social, cultural and historical boundaries, and their use can indeed be considered a universal feature of the human civilization proces. In this respect, he wrote:

> *Motives for occasional, or repeated use of these drugs are much more important than a collection of facts about them. All kinds of human contradictions meet here: barbarism and civilization in all its different grades of material possession, social status, knowledge, believe, bodily gifts, mind, and soul. On this level, artisans, and hedonists, rulers, and their subjects; primitives form some distant island or the Kalahari Desert meet with poets, philosophers, scientists, misanthropes and philanthropes. The man of peace encounters the man of war, faithful believer an atheist. Physical impulses capable of charming such distinct types of men must be extraordinary and far reaching. Many have expressed their opinions on them, but few have tried them and recognized their natural properties. Much fewer comprised their innermost meaning and motives of the use of substances storing such energy.*

In this quotation, Lewin refers to the fundamental question of psychonautic inquiry, namely to the anthropological question of meaning and function of psychonautic praxis. He wanders why people intoxicate themselves with substances that hold "*no nutritional value and are consumed solely for the sake of inducing temporary feeling of satisfaction, ease, and calm.*" Lewin derives the motivation to take drugs from the feeling, that is, from certain kind of experience, not from some material properties of the substance. However, although his account

245 Lewin, L. 1927. *Phantastica. Die betäubenden und erregenden Genussmittel. Für Ärzte und Nichtärzte*. Berlin: Georg Stilke. Cited from Lewin, L., Phantastica [online]. www.drugtext.org [cit. 2016]. Accessible from http://www.drugtext.org/Table/Phantastica/.

is still advanced and inspiring, it must be noted that experiences induced by psychedelics are much more complex, and cannot be reduced to a feeling of satisfaction, ease, and calm. But Lewin, as a pharmacist and toxicologist, was undoubtedly well aware that the same substance may radically differ in effect depending on the subject and overall conditions. I believe that it was indeed one of the reasons for developing his own classification of drugs:

> *I classify the agents capable of effecting a modification of the cerebral functions, and used to obtain at will agreeable sensation of excitement or peace, as follows:*
>
> *First group: Euphorica, sedatives of mental activity. These substances diminish or even suspend the function of emotion and perception in their widest sense, sometimes reducing or suppressing, sometimes conserving consciousness, inducing in the person concerned a state of physical and mental comfort. To this group belong opium and its components, morphia, codeine, etc., and cocaine.*
>
> *Second group: Phantastica; hallucinating substances. This series comprises a number of substances of vegetable origin, varying greatly in their chemical constitution, and to these belongs in its proper sense the name Phantastica, or Drugs of Illusion. The representatives of this group, such as mescal buttons, Indian hemp, and the plants which contain tropines, bring about evident cerebral excitation in the form of hallucinations, illusions, and visions. These phenomena may be accompanied and followed by unconsciousness or other symptoms of altered cerebral functioning.*
>
> *Third group: Inebriantia; These bodies can be produced by chemical synthesis (e.g. alcohol, chloroform, ether, benzine). A primary phase of cerebral excitation is followed by a state of depression which may eventually extend to complete temporary suppression of the functions.*
>
> *Fourth group: Hypnotica; sleep-producing agents, such as chloral, veronal, suphonal, etc.*
>
> *Fifth group: Excitantia, mental stimulants. Substances of vegetable origin which produce without alteration of consciousness a generally more or less apparent excitation of the brain. To this series belong the plants containing caffeine, tobacco, betel, etc.*"

This outdated, yet informative classification is based on three criteria: origin, quality of experience, and character of the change in cerebral functions. I cited this passage *in extenso* only to show that in the realm of drugs no definitive taxonomy and objective description of effects is attainable. Classification of drugs is un uncertain activity; it always depends on selected criteria, and must deal with not only the chemical, biological, pharmacological, and especially experiential variety of effects, but also with the discovery and synthesis of new substances. Each classification also strongly depends on selected discourse which decides what kind of description is indeed possible.

The influence of socio-political context is clearly recognizable in the word psychotomimetics. Lee and Schlain comment on its origin as follows:

> *When the CIA first became interested in LSD, only a handful of scientists in the United States were engaged in hallucinogenic drug research. The CIA's mind control specialists sensed a golden opportunity in the making. With a sizeable treasure chest at their disposal they were in a position to boost careers of scientists whose skill and expertise would be of maximum benefit to the CIA… Among those who benefited from CIA's largesse was Dr. Max Rinkel, the first person to bring LSD to the United States. In 1949, Rinkel, a research psychiatrist obtained a supply of LSD from Sandoz Pharmaceuticals in Switzerland and gave the drug to his partner, Dr. Robert Hyde, who took the first acid trip in the Western Hemisphere. Rinkel and Hyde went on to organize an LSD study at the Boston Psychopathic Institute, a pioneering mental health clinic affiliated with Harvard University. They tested the drug on one hundred volunteers and reported the initial findings in May 1950 (nearly three years before the CIA began funding their work) at the annual meeting of American Psychiatric Association. Rinkel announced that LSC produced 'a transitory psychotic disturbance' in normal subjects. This was highly significant, for it raised the possibility that mental disorders could be studied objectively in a controlled experimental setting.*
>
> *Rinkel's hypothesis was supported and expanded upon during the same forum by Dr. Paul Hoch, a prominent psychiatrist who would also proffer his services to the CIA in the years ahead. Hoch reported that the symptoms produced by LSD, mescaline and related drugs were similar to those of schizophrenia: intensity of colour perception, hallucinations, depersonalization, intense anxiety, paranoia, and in some cases catatonic manifestations. As Hoch put it 'LSD and Mescaline disorganize the psychic integrity of an individual.' He believed that the medical profession was fortunate to have access to these substances, for now it would be possible to reconstruct temporary or model psychosis in the laboratory. LSD was considered an exceptional research tool in that the subject could provide a detailed description of his experience while he was under the influence of the drug. It was hoped that careful analysis of these data would shed new light on schizophrenia and other enigmatic mental diseases*.[246]

In 1940s and 1950s, the term psychotomimetics, as was mentioned before, took up among psychiatrists and began to shape public discussion about psychedelics. The terms was influential due to, among other things, the connection of psychiatric research with the political and economic power (CIA and military

246 Lee, M., Shlain, B. 1985, p. 25.

research, pharmaceutical industry). A trace of this connection can be found in the Czech textbook of Military toxicology, in the chapter on psychotomimetics:

> *5.1 Mentally disabling substances (psychotomimetics)*
>
> *These substances are synonymously called psychodysleptics, hallucinogens, phantastica, psychedelics, or psycholytics. The term psychotomimetics became common in the military terminology. Many of these substances are misused as drugs. Psychotomimetics can be defined as substances producing changes around emotions and perception or inducing a disorder of thinking in a mentally healthy subject, without causing a deeper unconsciousness, or having notable effect on bodily functions. Their impact on human mind is accompanied by a complex biochemical change at the site of the primary effect; the toxicity is low. Disability they produce in the subject lasts several hours or days and has no fatal aftermath.*[247]

This layer of psychedelic rhizome thus relates to the political power and social control as it is linked to the clinical, laboratory, and military milieus. Psychotomimetics as disabling agents are used in the controlled experimental environments under the supervision of 'disinterested' scientists who intend to study the mind objectively to determine mechanisms of its alteration and control. In a more general context, ~~psychotomimetics has~~ under the rule of measurement and order as the highest imperatives of thinking~~,~~ which is characteristic of the modern scientific tradition. In science, phenomena defying measurement and observable order must be put under scientific supervision. Indeed, a mental disorder represents exactly such a phenomenon: it is a dis-order, defying measurability of positive data, yet, as a dis-order, it must be contained, diagnosed, and repaired. Psychotomimetics were conceived as tools of such objective control, and simultaneously as a weapon.

Psychotomimetic interpretation of psychedelics thus implies negative evaluation of psychosis and mental trauma. Surely, it is undeniable that psychedelics induce experiences similar to a mental disorder, at least in some aspects. A classic example was provided by A. Hofmann in the following quotation: "*a daemon had invaded me, had taken possession of my body, mind and soul. I jumped and screamed, trying to free myself from him, but than sank down again. The substance had vanquished me. It was the deamon that scornfully triumphed over my will. I was seized by the dreadful fear of going insane. I was taken to*

247 Patočka, J. et Al. 2004. *Vojenská toxikologie.* Praha: Grada Publishing, p. 55–56.

another world, *another place*, *another time*."[248] Also Grinspoon and Bakalar assert that the psychosis produced by a psychotomimetic is similar to the temporary acute phase of psychosis, and that it would be a mistake to ignore these similarities, "*since the symptoms overlap*, *the cause might prove to be the same*, *and it could even have consequences for the treatment*."[249]

The fact that psychedelic experiences include psychotic-like symptoms relates to their borderline nature. A psychedelic deteritorialization implies transgression of an established territory which, consequently, grants access to hidden traumatic motives, reveals the intrinsic structuring of our multiple personality, and confronts us with the contigency of our finality. Will is weakened, self--control withers away and one experiences being at the mercy of devouring and overwhelming powers. The radical psychedelic confrontation with our inner traumas, with the contingency of our life and the lost of control induces risky experiences bordering on the mental breakdown, and not everyone is ready to face them. Nevertheless, even such ominous confrontations might, in the end, prove healing and empowering in the sense of the saying "*What does not kill you*, *makes you stronger.*"

Such approach is characteristic of psychedelic therapy, since it holds that mental disorder doesn't need to be seen as an unwanted error, which must be eradicated. A disorder can be conceived positively, as an opportunity revealed in crisis which needs to be dealt with. To conceive of a disorder in such positive manner means to "*admit that psychosis might bring about insight*."[250] An insight of this kind shows that each crisis brings the opportunity to resolve it, that each disorder opens a possibility to establish a new order. When psychotomimetics started to be interpreted from this perspective, they have ceased to represent a weapon and become a possibility of a cure.

It is implicated in the relation between a concept and the theoretical and practical contexts of its use that the problem of finding a neutral and general

248 Hofmann, A. 2005. *LSD my problem child: Reflections on sacred drugs*, *mysticism and science*. Sarasota, MAPS, p. 16.

249 Grinspoon, L., Bakalar, J. 1979/1997. *Psychedelic Drugs Reconsidered*. New York, The Lidesmith Center, p. 252.

250 Scott J. Hill discriminates between the following types of psychedelic therapy: psycholitic, psychedelic, psychoanalytic, grofian, shamanic, jungian, hybrid, see Hill, S. J. 2013, p. 17–28. S. Grof provides similar scale: psycholitic, psychedelic, analytic, hypnodelic, and aggregate, see Grof, S. 1980. LSD-Psychotherapy. Alameda: Hunter House, p. 31–43.

term to designate substances in question is unsolvable. A new context of interpretation can bring forth a new name, such us, to name some of the recently developed ones, archaidelics[251], femtheogens[252], epilogens[253] or somatodelics[254]. I, therefore, dare to say that the nature of psychedelics is protean, and their true nature can not be separated from what we wish them to be. Their meaning is not objectively given, for it always involves a specific context of interpretation and instrumentalization. Each term used to describe psychedelics reveals another level of description and another layer of the rhizome, so to comprise them we need to untangle all of those layers. They are hallucinogens when we believe that they produce hallucinations. They are oneirogens, since they can produce dreaming experiences. They are phantastica because while intoxicated, our awareness is flooded by images. They are psychotomimetics, as they induce states similar to psychiatric disorders, and they are entheogens for they can induce story-like visionary experiences filled with religious symbolism or produce supposed mystical states. They are plant teachers since they mediate contents and insights that we cannot obtain by ourselves. They are cures and poisons when used to cure a disease, or to poison an enemy. From the perspective of this text, they are deterritorializers, e.g. substances causing deteritorialization of our semiotic niches, and they are liminalics, e.g. substances bringing about liminal states.

Chemists and psychonauts Ann and Alexander Shulgin, drug researchers aware of the protean and multiple character of psychedelics, have compiled monumental chemical and autobiographic works called Pihkal[255] and Tihkal[256], which describe chemical synthesis and subjective effects of 179 phenylethylamines, amphetamines and 55 tryptamines. In these books, they suggested an

251 Read, T. 2014. *Archaidelics. Amplifiers of the Archetypal.* In Psypress 2014 UK Vol. V, Falmouth: Psychedelic Press.

252 Papaspyrou, M. 2014. *Femtheogens. The Synergy of Sacred Spheres.* In Psypress 2014 UK Vol. V, Falmouth: Psychedelic Press.

253 King, D. 2014. *The Epilogenic Model*. In Psypress 2014 UK Vol. V. Falmouth: Psychedelic Press.

254 Frecska, E., 2015, *The Possible Role of DMT in Oxidative Stress & at the End of Life* [online]. Presentation at the Breaking Convention 2015, www.vimeo.ecologycosmos [cit. 2016]. Dostupné z https://vimeo.com/143114009.

255 Shulgin, A., Shulgin, A. 1991. *Pihkal. A chemical lovestory.* Berkeley, CA: Transform Press.

256 Shulgin, A., Shulgin, A. 1997. *Tihkal – Continuation.* Berkeley, CA: Transform Press.

elementary scale of drug's intensity and observable subjective effects. The scale operates with the plus and minus poles designating the substance's potency and characters of its effect. If the Plus value reaches over zero a subjective effect is observable. Minus means the opposite. Shulgins have determined four levels of intensity:

> *PLUS1 (+): The drug is quite certainly active. The chronology can be determined with some accuracy, but the nature of the drug's effects is not yet apparent.*
>
> *PLUS2 (++): Both the chronology and the nature of the action of a drug are unmistakeably apparent. But you still have some choice as to whether you will accept the adventure, or rather just continue with your ordinary day's plans (if you are an experienced researcher, that is). The effects can be allowed a predominant role, or they may be repressed and made secondary to other chosen activities.*
>
> *PLUS3 (+++): Not only are the chronology and the nature of a drug's action quite clear, but ignoring its action is no longer an option. The subject is totally engaged in the experience, for better or worse.*
>
> *Plus4 (++++): A rare and precious transcendental state which has been called a 'peak experience', 'religious experience', 'divine transformation ', a 'state of samadhi' and many other names in other cultures. It is not connected to the +1, +2 and +3 of the measuring of drug's intensity. It is a state of bliss, a participation mystique, a connectedness with both the interior and exterior universes, which has come about after the ingestion of a psychedelic drug, but which is not necessarily repeatable with a subsequent ingestion of that same drug.*[257]

The Shulgin Rating Scale renders the general naming secondary, for it replaces a closed univocity of a concept with an open and simple range of experiential effects, which may be subjective and loaded with religious interpretation (Plus4), yet, at the same time, it is utterly formal so that the content of respective grade is variable. The scale also involves the notion of the effect in terms of chronology of the drug, and the overall nature of its action. For Shulgin, each ingestion of a drug is an encounter and represents a plot in a complex story. Instead of univocal and universal definition of psychedelics, Shulgin provides a catalogue of subjective chemical stories, a special amalgam of scientific description and autobiographic notes.

The assumption that Shulgin has systematically avoided using a univocal term was supported by R. Strassman, who wrote: "*Many years ago, I attended a lecture by Dr. Alexander Shulgin on the chemistry of psychedelic drugs. Doing his best to put the nonchemist members of his audience at ease, he begun the lecture*

257 Shulgin, A., Shulgin, A. 1991, s. 957–68.

by sharing with us a simple model in which all psychoactive drugs belong to either the ↑s, the ↓s, or ~~the~~ □s."[258]

Substances designated with ↑ are stimulants (caffeine, nicotine, cocaine, amphetamine, methamphetamine, cathinone, Ritalin, or arecoline). Shulgin considered as stimulants those substances, which, in a reasonable dose, elicit a magnification or amplification of various psychobiological functions including attention, thinking rate and accuracy, wakefulness, level of anxiety, and motor activity. Substances designated with ↓ are called sedatives or downers and include hypnotics such as alcohol, Xanax, or Valium; narcotic opiates, kava-kava, or general anaesthetics. Regarding the last group, psychedelic hallucinogens, Strassman puts it as follows: "*The effects of ~~the~~ □ ~~is~~ more difficult to describe – but not because their effects are subtler, for they are anything but subtle at effective dose. Instead, these substances seem to modify the quality of consciousness, rather than produce the general enhancement or reduction of mental process*."[259]

The interpretation of ~~the~~ □ ~~symbol~~ that Shulgin chose for psychedelics can be at least twofold. In the first place, the picture of the star pointing to all directions may designate the universality of the psychedelic effect, since it influences the entire complex of mental and bodily processes. Secondly, it implies that during psychedelic experience our consciousness is deregulated, meaning that the substance dissolves the normal type of integration which is followed by reintegration, when our consciousness implodes and expands in all directions. Regarding the name, the star symbol tells us that the desired expression must comprise multiplicity – of experience, levels of description, and layers of our existence. Therefore, when we decide to restrict ourselves to using a simple general term such as psychedelics, we should be aware that, automatically, all the other concepts and their respective contexts are suppressed.

Most of contemporary psychedelic researchers resolves this situation similarly to Strassman, who wrote: „*The difficulty in describing accurately or consistently the effects of psychedelic drugs has led to a bewildering profusion of names for them: hallucinogen or illusogen, psychedelic, entheogen, mysticomimetic, oneirogen, phanerotyme, phantasticant, psychodysleptic, psychotomimetic, psychotogen, psychotoxin, schizotoxin, and deliriant. Each name captures a certain*

258 Strassman, R., Wojtowicz, S., Luna, L. E., Frecska, E. 2010. *Inner Paths to Outer Space. Journeys to Alien Worlds through Psychedelics and Other Spiritual Technologies*. Rochester: Park Street Press, p. 21.

259 Ibid., p. 22.

element of the intoxication and the manner in which we interpret those- what they mean and the drug produces it."[260]

The key sentence in this summarizing quotation is indeed the last one, since it claims that each name captures both, an aspect of intoxication and respective interpretation. The meaning of Shulgin's star, then, as I read it, is: it is impossible to fully capture the complexity of the psychedelic rhizome. We can only approach one element from one perspective at one time. Nevertheless, it is possible to map individual layers of the rhizome and propose a model of their interconnected structure and dynamics. However, if someone claims to know the true nature of psychedelics and their action, he or she must be suspected of lacking sufficient information, or being a reductionist. If the reductionism is intentional, no objection would be raised. Yet, to comprehend the psychedelic rhizome in its complexity than a simple, univocal definition will not hold.

260 Ibid., p. 23.

Modelling the domain of psychedelic experiences

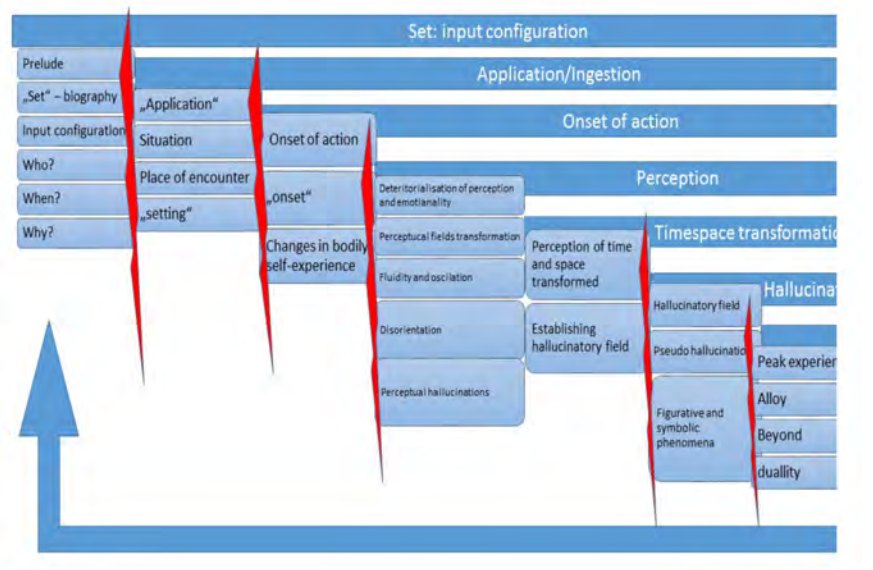
> *I'll even hazard to suggest that complete cognizance of CydelikSpace is not possible for any individual or entity. There appears to be a paradox in that to comprehend CydelikSpace in full one must shrink to a point of zero, at which stage there would be no experience or perception. To function as a human, and comprehend CydelikSpace, is not possible*.[261]

My analyses of psychedelic domain draws on the above quotation to only some extent. It is indeed impossible to comprehend the psychedelic domain in it complexity, but not because it is some metaphysical dimension underlying perceived reality, as D. M. Turner suggests, but because any experience, even the psychedelic one, is always bound to one's individual situation. Undoubtedly, the meaning of being human is a fundamental philosophical question. Moreover, it is also true that a fully developed psychedelic trip includes the experience of transcending one's individual situation, one's own body, social and cultural norms, or even the time and space itself. Therefore, I will formulate the above-mentioned paradox as a question: How to explain that, on one hand, we are always bound to the here and now, and that, on the other hand, we can transcend the here and now and experience contents that are normally inaccessible to our individual mind? A preliminary answer to this question would be that any experience is possible only within a preceding context – a social, ecological, and even cosmic, and that, from the perspective of experience, this encompassing contextuality has semiotic character, that is, it is a context of significance, or meaningful communication. By reterritorializing our brain/mind/body, a psychedelic experience opens and extends our cognitive capacities for much wider context than the normal, functional one.

The analyses introduced in this chapter are derived from the unpublished protocols and memories of my own experiences, and from the records and reflections reported by other psychonauts. The goal of this chapter is to put forward a model that will enable orientation in the relational time-space of an psychedelically modified activity. The proposed model is conceived as a tour

261 Turner, D., M. 1994. *The Essential Psychedelic Guide*. San Francisco: Panther Press, s. 116.

guide based on the reports of individual travellers who had strived to find their ways through the intricate psychedelic terrain. None of them departed on the journey without a map, without understanding what lies ahead, but it is the experienced situation itself, in the end, what gives one marks and directions which are unique for each traveller. The result of these explorations cannot, therefore, be explored as some objective knowledge but as a crossing of various views uncovered during various intersecting travels.



To arrive at such a model and describe the regularities of psychedelic experience requires repeated observations; therefore, it is ideal to repeat the experience under different circumstances. Such regularities become apparent only after several travels as one becomes accustomed to the process. For the most part/ Generally, five to ten experiments suffice to become aware of the basic chronological structure. Despite the substantial distortions of time perception, psychedelic experience has a recognizable linear chronology, it unfolds in distinct phases whose description is the basis of the proposed model. Although various chronological maps can be found in literature, it was necessary, for the sake of this inquiry, to create a new one, depicted in the schema below. The blue arrows designate individual phases separated by the red zig zagging lines that designate phase transitions. Once a phase is initiated, it continues to be

present throughout the rest of the experience. A phase transition represents the global transformation of the character of the experience. The integration phase designates a process of integrating the past experience into the normal everydayness. The return to the initial setting represent the hermeneutical nature of the experience, that is, a past intoxication becomes a part of a new initial setting.

Application: Set and setting principles

Each intoxication starts with application, e.g. with digesting, smoking, injecting, or any other way of introducing the substance into the body. The application itself should be, for practical reasons, preceded by choosing an appropriate time and place. The uncontrollable and demanding character of the experience entails disconnection from the everyday course of life: relieving ourselves of all responsibilities and unwanted influences, and finding a safe space where we can give ourselves over to psychedelic trance for several hours. Similar steps pertain to all contemporary types of psychedelic praxis. During a neuroscientific research, it is necessary to ensure an undisturbed experimental space where observations and measurements can be made. Similarly, it is necessary to secure a protected environment suitable for unfolding the psychotherapeutic process with a substance. Rave parties take usually place out of the city centres, in hayfields, tourist camps, or deserted city outskirts. A shamanic ceremony also includes creating a sacred space and time. Although a drug can be obviously applied at any time and in any place, these preparations and safety precautions are sensible because an appropriate time and place decide about the quality and content of the entire experience.

The first phase following the applications comprises the time necessary for the biochemical changes to become apparent as psycho-physical events on the phenomenal level. It is the time between digestion and the very onset of recognizable effects which usually takes between 30 to 90 minutes, depending on the dose and overall conditions. This phase includes the first phase transition as the moment of ingestion is the point of no return. An intoxicated subject submits itself to the substance, and, for the following hours, loses control over the course of its experience whose transformation is now unavoidable. At this moment, there is no time for further preparations, everything must be done beforehand.

Since the variability of psychedelic states, which is the function of set and setting, does not allow to fully anticipate the course and content of the

experience, one is, at its beginning, confronted with expectations. In my case, I usually doubted whether the substance would have any effect at all, whether I would experience anything that matters to me, or is at least interesting, or whether I might be harmed. One can be afraid whether one will get through the process, or, conversely, whether the whole thing is not just an illusion based on wishful thinking. On the other hand, even a slightly experienced user knows that what is about to happen is going to be extraordinary, as she will feel and see things inaccessible to the usual waking awareness. Joyful expectations will mix with worries, trust with scepticism. To put it metaphorically, one is already on the road but still remembers home. The normalised, everyday territoriality had been closed and the unfamiliar territory did not open yet.

In any case, one should not enter the hallucinatory thicket without preparation, although it need not to be very profound. It is sufficient to abide to one simple rule: expect the unexpected. No preconceived knowledge can prepare you for the intensity of the first psychedelic impact, and excessive expectations may even result in disappointment and cognitive dissonance. Yet, the impact of psychedelic transformation under supra-liminal doses is usually so strange and so intensive that to start a trip without some guidance or minimalistic preparation can be dangerous, or at least highly unpleasant. Besides the before mentioned rule, the minimalistic preparation should include the knowledge of two well-known principles of set and setting

Set

The principle of set relates to the individually, socially, and historically variable structure of expectations. The structure of expectations has hermeneutical and ontological character. From the hermeneutical perspective, it comprises the entire complex of our pre-understanding, all our conscious, pre-conscious and unconscious experiences; from the ontological perspective, it is a totality of our being, and the source of contents that appear within the expanded field of experience. The set is important not just for the sake of the quality, e.g. the safety and the benefit of the psychedelic experience, but mainly because it forms the very matter from which its content is created. This text focuses mainly on the structure and dynamics rather than the content of psychedelic experiences; nevertheless, what is being revealed within a hallucinatory state is exactly the content of our situatedness, our place in the intertwining, the very essence of our knot in the relational web of being: who and how we are, our origin, what connects us and how, and what the inner and outer structure of our existence

is. Obviously, this all is revealed neither at once, in a single vision, nor within a single experience, as the hallucinatory content is always fragmented and episodic, and its proper comprehension requires an experienced interpreter who knows how to read it and work with it.

An interpretation of the overall meaning of psychedelic experiences represents a key part of the conscious layer of our expectations. In this respect, I would especially like to address two approaches. The first one is indifference, the second one is a dualistic metaphysical interpretation. Indifference pertains to the cases of irresponsible and dangerous behaviour when a substance is given to someone without his or her consent. Unfortunately, such things may happen within the wild psychedelic praxis. Unexpected, surprisingly shattering, and deep changes induced in this way may result in a panic attack and harm. However rare these cases are, they relate to the broader and more interesting type of indifference. It is the indifference towards the overall meaning of psychedelic experience which is relatively widespread among wild users whose only reasons are hedonistic. Their answer to the question 'Why do you take that?' is something like: "I just want to get high. I just want to rave and party. No goal, just fun", etc. Even this type of approach is instructive to analyze since it reveals a specific personal, social and cultural context. It is, for example, impossible to find such an approach among tribal shamanic collectives because they have no concept of boredom, "just fun", or leisure time as opposed to the time of work. Their usage of psychoactive substances has always some practical purpose, be it divination, therapy, or warfare.

This kind of indifference is a modern phenomenon and relates to particular aspects of modern social life. Abuse and misuse of psychoactive substances is typical of liberal societies that are based on the "pursuit of happiness", whose social structure is fragmented and atomized, and whose dynamics is determined by the rhythms of work (factory, office, and school) and leisure (vacation, entertainment, etc.). Both domains, that of the working day and that of the night, are propelled by the same principle: increasing the power of each individual and the whole society. Increasing effectivity, performance, outcome, productivity, etc. dominates our working time, while increasing pleasure and accumulation of experiences dominates our leisure time. Psychoactive substances used in our societies are connected to such dynamism in several ways. Stimulants allow us to push further, stay awake longer, concentrate more, whereas sedatives allow us to slow down, numb ourselves, inhibit our activities, and turn off the incessant drive of modern life. All kinds of drugs are used as a means of escape from the demanding and stressful existence. Thus, the indifference to any higher

meaning of psychedelic experience has in fact complex motivation: to escape, find pleasure and a community of similar people. Therefore, such usage cannot be judged as something intrinsically bad, especially if we consider cases when indifferent, escapist, or purely hedonistic users discovered an exploratory and transformative potential of psychedelics

Still, numerous people who are aware of the exploratory potential of psychedelics do not use these substance to acquire distance and better understanding of their situation, but to enhance their power. They are not interested in escaping or changing themselves or society, but consider these experiences as mere tools to become more effective or creative. They do not intend to study the path of poisons, but seek to enhance their existing qualities, for instance their goal to become better managers, programmers, better at whatever they do. The best example of such ~~an~~ approach is the new type of psychedelic praxis called micro-dosing[262], a practice widely discussed in media and on the internet. Micro-dosing is founded on administration of subliminal doses of psychedelics to improve creativity, boost physical energy level, or increase performance on problem-solving tasks. It is a typical example of modern utilitarian psychedelic praxis. There is no philosophical or self-exploratory goal, no need to explore the realm of consciousness or the nature of psychedelics themselves. Such practice probably includes indifference to higher knowledge, yet it is perfectly legitimate, especially in terms of modern culture.

Modernity, its cultural and social relations, represents an inescapable context of our use of psychedelics. Members of individualistic, atomized, and power-driven societies have no choice than to use these substances for personal enrichment, individual escape, or self-exploration, similarly as members of tribal societies have no choice than to use them in a collective manner – for divination, healing, or contacting ancestors and spirits they believe in. In this respect, neo-shamanic practices, which are currently spreading over the Western world, represent an interesting crossover between tribal and modern approaches. Seen from the outside, neo-shamanic rituals consist in practices (having an altar, using certain decorations and musical instruments), believes (animism) and rules of tribal society, but inside this exotic scenery, there are modern people trying to grasp the rest of the sacred that was eliminated by the modern civilisation long time ago. I have personally taken part in one such ceremony, which is certainly not enough to pass a general judgement, but what I saw there were mostly unhappy or curious moderns: a girl addicted to amphetamine, a divorced

262 Fadiman, J. 2011. *The Psychedelic Explorer's Guide. Safe, Therapeutic, and Sacred Journeys*. Rochester: Park Street Press. See Part 4, Chapter 15: *Can Sub-perceptual doses of Psychedelics Improve Normal Functioning*?

musician who lost a notebook with all his recordings, young people searching for their identity, or an older women lost in a magical narrative; on top of that, a Bulgarian lad who persuaded himself to be a shaman, repeating actions out of another social and historical context. Yet, we moderns, devoid of any access to spiritual guidance, a proper community outside our nuclear family, destined to be individualistic and self-centred and at the same time hostile to the state and its institutions, lack enough alternatives to find a set and setting that could satisfy our psychological and spiritual needs.

Unfortunately, many neo-shamanic or new-age religious practices are permeated by pre-modern, metaphysical narratives, which belong to another time and place, and seem strangely alienated from how we moderns think. A good example is the Jochen Kirchoff's book *Die Anderswelt* with the following interpretation of psychedelic experiences:

> *The sensory world is but an illusion, it is a Maya; another world exists behind and inside it, a true reality, the only one that is important and absolutely valid. From this perspective, the sensory world is but one great illusory bubble, collective delusion, phantasmagoria, a universal dream. We are immersed in a dream of the only real (higher, cosmic) being: man is often considered to be an integral part of this being, and his goal is to remember his partial being, his deeper identity*.[263]

Such dualistic and metaphysical interpretation is for many reasons misleading. It devalues ordinary, sensory experience rendering it mere illusion. It is not uncommon among those who practice psychedelic experiences, especially in the neo-shamanic context, to comprise of their ordinary experience exactly in this manner. Many psychedelic users can develop the "delusion de grandeur", the idea that in an ecstatic state they are able to comprehend this higher reality hidden behind appearances, and persuade themselves to be something more or better than ordinary people. Undoubtedly, the experience of myself as an integral part of a wider whole is the typical aspect of majority of psychedelic experiences. But to interpret such experience as otherworldly, as a penetration into another dimension might result in a deeper alienation from our everyday life, from our significant others, and the society in general.

On the other hand, it is necessary to admit that the desire for transcendence, for an escape from this ordinary world of suffocating social and political circumstances represents a legitimate motive of intoxication. Moreover, such drive is one of the original "dynameis" of human existence in general. It relates to the fact that we human beings are not self-contained closed units separated

263 Kirchhoff, J. 2002, p. 52.

from each other, but connective nodes whose mode of existence implies transcendence in the sense of coming out of oneself; we are a double ~~activit~~ of concentration and transcendence, functionally closed, but communicatively open living systems necessarily related to the outside, things, beings and events other than us which we need to approach or take distance from. We are animals defined by self-transcendence, beings filled with desire to exteriorize interior and interiorize exterior. We cannot but connect ourselves to various exterior sources of subsistence, be it nutrients, tools, or other beings. In this respect, the desire for intoxication, transcendence of one's situation, and connection to the wider expanses of this cosmos seems natural and unavoidable. Any interpretation of this drive is then a secondary social by-product, yet it does not mean that each interpretation is useful or beneficial.

In this respect, J. Kirchhoff states: *Every transcendental experience of mystical, spiritual, but also psychedelic nature overcomes our everyday ego-consciousness. Traditional cultures have developed highly differentiated forms of rituals to cope with such experiences. Who exposes him or herself to these powers without the protective sphere of ritual, for example when ingesting high doses of psychoactive substances, can be, unexpectedly, confronted with a giant mercilessly destroying all the safety systems. One might, thus, fall for demons. And even if the situation is not exactly horrifying, one is always endangered to be torn out of everything he was used to, and to be tossed around like a helpless piece of cork by ocean waves*.[264]

To be tossed around like a helpless piece of cork – our bodily feelings, emotions, imagination, and thinking are literally flooded with a highly intensive stream of experiences, our mind-body is out of control, and nothing works the way we are used to. That was the reason, why C. G. Jung refused to use psychedelics as referred by J. S. Hill:

> *In the letters concerning psychedelics, Jung repeatedly pointed out, that psychedelic drugs make it impossible to keep the stability of an ego, indispensable for a productive relationship to unconscious. Jung asserts that the extraordinary perception experienced in a psychedelic session appears because the lowering of the level of consciousness makes it impossible to oppose the unconscious. In the letter to the psychedelic psychotherapist Betty Eisner Jung explains that he approaches the use of psychedelic drugs with suspicion, although he is aware that they can be opening for new perceptions and experiences which appear in mystical states or during analysis. 'I am not much zealous about these things', he writes, 'since one falls into these experiences without being able to integrate them'*.[265]

264 Ibid, p. 33.

265 Hill, J. S. 2013, p. 48.

It is apparent that Jung had no experience with psychedelics, since there are many elaborate methods of integration that can be used. Yet, he was also quite sensitive to the therapeutic and exploratory potential of these drugs. There is no doubt that these exquisite and dangerous substances should be approached with caution and with a great deal of knowledge. Our contemporary, post-modern culture as a mixture of different perspectives and historically distant approaches allows us to combine pre-modern, tribal approaches with the modern ones. We should always keep in mind that psychedelics can be underestimated or overestimated, that we can devalue them or give them too much credit. Uncritical, mystical, and metaphysical approach may be connected to the believe that psychedelics reveal an eternal and transcendental knowledge, that they open the way towards original, archaic consciousness unspoiled by culture. An overtly critical approach, on the other hand, may render them useless, stressing their dangerous side. I believe that a psychonautic approach should be situated in the middle: between the trust and critical stance, individualistic and collective, religious and materialistic. Simply stated, it should be philosophical.

Setting

The principle of set is complementary to the principle of setting. The principle of setting pertains to the importance of the physical time-space and the intersubjective context within which a psychedelic experience unfolds. Personally, I have intoxicated myself in various environments and different intersubjective constellations. Mostly, I was alone, but I have used psychedelics also in a couple, with a smaller group of friends, among a group of strangers, or at a party counting hundreds or thousands of people. I took my trips in an apartment at the city outskirts, inside the central city zones, or while travelling through vast housing estates. I have intoxicated myself at a psytrance party that took place in a baroque church, or at a free techno party that came about in a large space consisting of several hayfields full of people, music, and images. I spent my psychedelic travels in a half-ruined farmhouse, renovated eighteenth century mansion, artistic colony amidst hills, forests and fields, in a garden cottage, at the hilltops of the Czech Central Mountains, or on the banks of Labe and Vltava rivers.

It is a common knowledge among psychedelic practitioners that the environment where a psychedelic session takes place is of immense importance. The rule of the safe place applies across different contexts. A safe place is a location where an experimenter can go through the trance undisturbed, feel comfortable, and where ideally someone will take care of him. However, a setting considered

as an external environment imbued with sensory qualities is not just some decoration, otherwise indifferent to the course of experience. The rule of the safe place is applied because the environment directly enters the hallucinatory experience and influences its overall character. The overall character and the specific content of psychedelic experiences differs depending on the location, because the environment manifests itself to us through its cognitive qualities: through its sounds and smells, shapes, and colours, through its tactile and comprehensible features.

Our experience is always an encounter of set and setting, subjective and objective aspects of reality. Our experience in general is not an inner process of receiving and compiling information, purely subjective representation of the objective milieu. To experience means to relate to something, experience is a relation between the one who has the experience and the what is being experienced. It is the relation between the inner and outer, subjective and objective, or rather a process that goes beyond such duality and constitutes a third sphere where both poles permeate and intertwine. Experience is intertwining, it is the process of our entwinement with the world. We are always already in the world as its part. We are made of it, and our cognition is an inner-worldly activity unfolding as a reaction to and negotiation of our location within the time-space. Experience is communication in the sense of communion: a mutual giving and receiving, activity and passivity, or reciprocity.

The outside, therefore, does not enter the process of experience as an external onstage decoration. Experiencing beings have constituted themselves in an exchange with the outside since their inception. We are made in and by the process of encountering, conflict, and coalition with the outside. The outside gives our experience a tone, overall atmosphere of a dark, closed space, open landscape in daylight, or a cityscape. During the psychedelic intoxication, the boundary between the outside and inside (which we maintain in waking state) is temporarily suspended, and the relational third space is revealed. I am becoming a pure perception without the subject/object division. A hallucinatory field does not operate under such duality, it is neither subjective, nor objective

Onset of psychedelic effect

The introductory phase of a psychedelic intoxication comprises the time between application and onset of the first perceptual effects. The intoxication starts as a combination of alcoholic and THC inebriation, but it gets gradually deeper, absent of sedative effects. The feeling may at first resemble the peak

phase of alcoholic inebriation, it is joyful and communicative without deliriant aspects such as head spinning or nausea. Social barriers are melting, the subject loses interest in the past or future, fully immerses itself in the present moment, leaving worries and heaviness of everyday existence behind.

In terms of physiology, the body temperature fluctuates and strong shivers may appear as the whole organism turns to a higher gear, and the body produces alternating waves of cold and heat. This basic wave-like pulsation is usually accompanied by growing distraction and lack of concentration. As the intensity of these effects grows stronger, there comes pressure in various parts of the body, especially in the head, loins, and groins. The intoxicated person is rapidly flooded by feelings of growing intensity, which transform the pleasant inebriation into instantly rising "buzz of the stream," dragging one down towards the things that are about to come. Yet, this process does not lead to a loss of consciousness as with overdosing on alcohol. Rather, it leads to the loss of control over one's own mind while, at the same time, one is fully aware of the vibrating flood of bodily feelings. Especially with the first psychedelic experiences, these feelings may produce a surprise or even fear, since their intensity grows exponentially higher than with alcohol or cannabis, and there is no sedation, no calming down. I well remember my first experiences of this kind when I simply wished that it ~~could~~ stop as the power of vibrating flood felt as if tearing me apart. The violent, vibrating, swallowing, and pulsating dynamics is mainly typical of LSD, or psilocybin. According to the reports, ayahuasca sessions tend to be even stronger, deeper, and heavier, usually accompanied by vomiting, feelings as if one is going to vomit one's whole person out. Nevertheless, the character and duration of the onset phase generally differs with each substance, dose, set and setting. With the supra-liminal doses of LSD or psilocybin mushrooms, the onset's duration is about 30–60 minutes, and, to sum it up, its typical effects can be described as follows: sober inebriation, exhilaration, gradual intensification of bodily feeling, oscillation of temperature, growing strangeness, inability to concentrate, shivers and vibrations.

The onset phase precedes the phase of perceptual transformations. The very fact that the onset is actually discernible, that I know something unusual is occurring to me before the perceptual and ideational changes become apparent, represents an important motive of the embodied interpretation of psychedelic experiences. The psychedelic effect bound to the pharmacological action of a substance commences on the pre-reflective and pre-perceptual level, and the physiological effects hereby produced continue to work along the whole session. That means that psychedelic experience is not only and mainly visual or ideational, but also visceral. It permeates the entire body, not just the

brain. It is autonomous with the respect to the intentional, object-oriented consciousness and begins (and continues) to run on the level of autonomous bodily processes and self-regulating bodily systems. Therefore, a psychedelic experience is not an alteration of consciousness in the sense of an incorporeal substance, but alteration of the overall functioning of an organism. A psychedelic action starts in the brain, but the effect is holistic. Regarding the hierarchy of cognitive levels – from proprioception to abstract thinking, it is the bottom to top process. Yet, as the effect reaches higher levels and turns the experience into the hallucinatory field, it can also operate from top to bottom: when a hallucinatory content makes one to move in a certain way or evokes strong emotions like fear or ecstatic pleasure.

Deterritorialization of perceptual field

The following phase commences when mostly physical feelings, resembling a "buzzing stream" or wave-like pulsation, externalize themselves and spread out into the perceptual fields. During the phase of perceptual transformations one begins to perceive differently, or perceives things that are normally not perceivable. The deterritorialization of perceptual fields entails defocusing, intensification and eventually a complex transformation of perception.

This feeling of wave like pulsation permeates the whole body, but usually emanates from the areas of loins, groins, heart, and head. Wavering of pressure and release, of pleasure and fear grows gradually stronger until the vibrational action hits one's sensorimotor system and desynchronizes it. Voluntary movements become difficult, limbs start to behave erratically and may seem like alien objects. The entire body schema becomes defocused and unstable

This process keeps externalizing itself and expands to perception. The visual field begins to undulate, move, and becomes ambiguous. The visual experience acquires vibrational quality, becomes alive, and gets deeper, viscous, and fluid. The perceived visual objects develop autonomy, they pulsate and waver, simultaneously losing their usual colours which start to oscillate between their different shades. Moving objects can be seen in every phase of their movement as with the famous Zeno's flying arrow frozen in each moment of its path. As this stage develops further, visual objects may also start morphing, change their shape, surface, and even identity.

Within the profound destabilisation of the visual field, a contrary effect is exerted in turn. When one manages to focus on a single perception, the vision becomes over-focused and reaches far beyond a normal visual fixation on an

object. It seems as if one could dive into the depth of a viewed object or scenery while it opens wide appearing almost infinite and inexhaustible. One can see a whole desert in a grain of sand, to paraphrase W. Blake. Some objects and situations open, begin to communicate with you, drag you inside themselves while talking to you without words.

This unfocused, deformed, but simultaneously deeply involving visual field may be also covered by transparent stripes of entoptic phenomena: moving lines, dots, spirals, or irregular primitive shapes. The visual field gradually loses its compactness and unity, breaks up into intertwined, and at the same time separate layers and lines. Consequently, perceptions cease to be bound to their usual contexts. Things become open, perceptions become open.

Emergence of hallucinatory field from deterritorialized perception

Once our perception transforms and things open up, certain phenomena acquire the status of a "switcher". Some objects or situations, but also feelings, memories, or ideas present themselves as distributors or switchers that lead you to a new phase of psychedelic intoxication. The switchers are phenomena that communicate with you, open up to you and uncover the expanse of reality normally hidden behind them. One no longer simply sees or hears but begins to travel through the open phenomenon into the domain of autonomously streaming imagination. The stream of imagination is autonomous in the sense that one does not create its content voluntarily by actively focusing on an image in mind. Rather, the deterritorialized perceptual field loses its exact limits and fuses into a new formation. As one falls through an open percept into the domain of contents that are not physically present, the proper hallucinatory field emerges. Non-perceptual contents form themselves autonomously within the network of contexts and associations that are directly or indirectly connected to the ongoing/evolving perceptions.

In this respect, an encounter with something imbued with a personal significance tends to be most dramatic. I chose, therefore, to describe this process on the example of encountering a stinging nettle, which occurred during one of my LSD sessions. Before the session, I was working in my garden, getting rid of weed, mostly consisting of huge nettle bunches. Tearing out nettle means that you must pull out not just the single plants but their entire interconnected root system, and, of course, you get repeatedly stung. When one performs such an activity for a sufficiently long time, one eventually becomes, as it were,

"nettled" which means that after such an activity one can easily envision nettles behind closed eyes.

Afterwards, when I had ingested LSD, I was walking around the garden, visiting places I had weeded. Having my perception already deterritorialized, I saw nettles, together with grass and trees, and everything was alive and moving. When I focused on a bunch of nettles, I saw swiftly changing shades of green on pulsating jagged leaves. Every straw, and every cluster of plants was breathing and wanted to grow, spread and claim the space in competition and symbiosis with other plants. When I thereupon closed my eyes, inner images appeared of jagged, stinging nettle beings, growing and hungry, spreading their roots on and on. As the vision developed further, I was getting deeper inside the soil, inside the tangle of roots, dirt and humus, and the dimension of decay opened to me, with the new sprouts always shooting from it, immediately transforming themselves into interwoven bodies of toothed stinging serpents.

Another example would be the encounter with cables in a flat within a block of flats within the huge housing estate at the outskirts of a city. On LSD again, I was looking at a computer and its peripheries connected by a tangle of cables which turned into a switcher. Cables started to turn and twist and transformed into the threads of energy and information connected to the network that runs throughout the whole estate. I suddenly envisioned myself as a cyborg in the sense of a human being physically connected to and dependent on the networked machinery of electricity production and information distribution which run through the flat, through the city, through the country, and eventually the entire world. I perceived myself at that moment as a human-cyborg spider entangled in the webs, fed by electricity, squeezed in its concrete cell, and forced to make its own webs.

The transition from an altered perception to a hallucinatory landscape can be now described in the following way. First, pulsating vibrations flow through the body, then the vibrational quality extends to the perceived contents, which opens up and release meanings sedimented within them. During such transition, perceived phenomena cease to possess their stable, firmly defined identity and transform themselves into a knot in the web of wider contexts. Various lines start to flow in and out from the phenomenon opening its wider being. Although the object or situation is still present, the intoxicated person starts to perceive the full range of its hidden layers, relations, and links, which freely revolve around the configuration of the knot. The phenomenon suddenly presents itself as a concentration and crystallization of the relational time-space, thanks to which it can exist in the first place. A leave ceases to be a mere leave and presents itself as a living part of a tree system, which itself is a part of the

surrounding environment the tree depends on, since the environment is the source of nutrients running throughout it. Leave-tree-surroundings create a living whole of growth and decay, competing and symbiotic growth of one thing from the other, and within which everything lives and dies in a mutual exchange.

Synaesthesia and dis-aesthesia

A psychedelic experience developed into its hallucinatory phase is not just visual and imaginary. On the perceptual part, the whole psychedelic experience is synesthetic. Synesthetic aspect pertains to perception in general as Merleau--Ponty points out:

> *The senses intercommunicate by opening on to the structure of the thing. One sees the hardness and brittleness of glass, with a tinkling sound, it breaks, this sound is conveyed by the visible glass. One sees the springiness of steel, the ductility of red-hot steel, the hardness of a plane blade, the softness of shavings. The form of objects is not their geometrical shape: it stands in a certain relation to their specific nature and appeals to all our senses as well as sight. The form of a fold in linen or cotton shows us the resilience or hardness of the fibre, the coldness or warmth of the material. Furthermore, the movement of visible object is not the mere transference from place to place of coloured patches which, in the visual field, correspond to those objects. In the jerk of the twig from which a bird has just flown, we read its flexibility or elasticity. One sees the weight of block of cast iron which sinks in the sand, the fluidity of water and the viscosity of syrup. In the same way, I hear the hardness and unevenness of cobbles in the rattle of a carriage. Though one may doubt whether the sense of hearing brings us genuine things, it is at least certain that it presents us, beyond the sound in space, with something which murmurs, and in this way communicates with the other senses. If then, taken as incomparable qualities, the data of the different senses belong to so many separate worlds, each one in its particular essence being a manner of modulating the thing, they all communicate through their significant core.*[266]

Under the influence of psychedelics, perception is altered in the following ways: 1) individual perceptual fields present themselves as separate, they transform into freely floating qualities released by concrete phenomena yet unbound from them; 2) detached and oscillating perceptual fields open up and are transferred

266 Merleau-Ponty, M. 1958/2005. Phenomenology of Perception. Transl. by Colin Smith. London/New York: Routledge, p. 266–267.

into the stream of unbound imagination flooded by inner images remaining at the same time closely interconnected. I experienced such detachment of perceptual fields repeatedly with sounds, colours, and tactile or olfactory qualities. Strongly visual psychedelics like LSD, psilocybin or mescaline produce colour transformations of two types: a) At first, colours become fluid, unstable varying between their different shades. Colours decompose but remain bound to things. b) The colour spectrum may separate itself from the phenomena and present itself as a colourful hallucinatory layer floating somewhere in between the perceived things and the perceiver. They detach themselves from objects and are visible as a weird colourful fog, or as stripes of colours

Taste, hearing, smell and touch may undergo similar transformation. Regarding the sounds, first, they turn strangely alien and cannot be precisely localized. When playing a drum, its sound ceases to be the mere sound of a drum, it spreads all around, permeating everything, coming from anywhere and nowhere at the same time. Distant sounds very often appear to be close and vice versa. The whole experiential field is permeated by crackling, murmuring and buzzing, which are acoustic analogues of entoptic phenomena. Within the deterritorialized acoustic field, sonic phenomena start to appear without having any identifiable source such as a loud crack in the air that vibrates throughout the whole space, or a music without anyone or anything playing it. As the whole acoustic field becomes distorted and detached from things, it gains supra-sensory depth and opens up towards the hallucinatory field. Sounds become detached, freely floating entities that transform themselves into acoustic hallucinations filled with life. Simultaneously, these hallucinations become connected to the psychophysical vibrations and intertwine with other layers and lines of the psychedelic field to form a united, but highly chaotic milieu. A similar process pertains to touch and smell, but also to emotions, imagination or thinking. Regarding perception, Merleau-Ponty describes the synesthetic aspect of perception as follows:

> *Let us apply it to the problem of the unity of the senses. It cannot be understood in terms of their subsumption under a primary consciousness, but of their never--ending integration into one knowing organism. The intersensory object is to the visual object what the visual object is to the monocular images of double vision, and the senses interact in perception as the two eyes collaborate in vision. The sight of sounds or hearing of colours come about in the same way as the unity of the gaze through the two eyes: in so far as my body is not a collection of adjacent organs, but a synergetic system, all the functions of which are exercised and linked together in the general action of being in the world, in so far as it is the congealed face of existence. There is a sense in saying that I see sounds or hear colours so*

> *long as sight or hearing is not the mere possession of an opaque quale, but the experience of a modality of existence, the synchronization of my body with it.*[267]

During intoxication, the synergetic synaesthesia becomes apparent in two ways. First, paradoxically, as dis-aesthesia: singular perceptual qualities and whole perceptual fields seem detached and unbound. Detached fields encounter and mutually permeate each other while their boundaries blur. Unbound and newly interconnected perceptual and other cognitive fields merge with the pulsating, fluctuation, wavering and fluid base, thus producing a new type of experience, psychedelic hallucinations proper. Now, a new time-space opens up, existing before and beyond, beside and inside the normally experienced reality. The next step is, therefore, the description of the altered perception of time and space

Psychedelic experience of time and space

~~The qualities of the experienced time are different than those of the measured time.~~ Experienced time does not have a stable rhythm, its rhythm changes according to the context and situation. Subjective time can be slow or fast, full or empty, and it does not respect the rhythm of the clock but stands in ~~a~~ relation to diverse types of repetition: sunset and sundown, metabolic rhythms, seasons of the year, rhythms of social events and holidays, etc. Its pace does not depend on some machinery but on our actions and ~~the~~ actions of our environment. Experienced time does not unfold somewhere outside of us, it runs through us as an aspect of our perception, structured by our activity/passivity in the world. The same applies to space, as it is not a three-dimensional system of coordinates, but a system of locations, movements and directions of a living being in its environment.

Transformation of experience induced by psychedelics is also ~~the~~ transformation of time (and space), of time-space. The most typical change in time experience under the influence of almost any psychoactive substance (alcohol, tobacco, caffeine, THC, etc.) is the immersion in the moment, as is the immersion in the place for ~~the~~ experience of space. Once I immerse in a perceived detail, it opens up and reveals its relational domain, its contextuality. Observation of a detail becomes so fulfilling and intensive that it seems

267 Merleau-Ponty, M. 19587/2005, p. 271–272.

to have immeasurable duration while objectively only a few minutes passed; it also seems as if all the surroundings were concentrated in one little spot.

Psychedelic perception of time decelerates and accelerates simultaneously. Each moment overflows with intensity of perceptions and images, but it also seems that time has stopped or that it runs so slowly that its every instance is present, phase by phase, position by position. I experienced extreme reduction of time speed on LSD when encountering a rock. I was standing in the recess of the rock, touching and feeling the stone. It pulsated and breathed, emanating waves of energy which subsequently transformed into a vision behind closed eyes. I started to see ~~the~~ imaginary history of the rock. First, it was a mass of red-hot magma squirming in the ocean of exploding pre-historic landscape. Then it started to cool down, solidify, finally forming a hill. Plants began to cover its surface and the rock fell asleep, the pace of its time grew slower as it was changing into ~~the~~ gradually disintegrating sediment on which much faster lives of plants and animals prospered. A contrary example to the rock-solid slowness of time could be an experience I was told about by an Englishman, who, after taking psilocybin mushrooms, got transformed into a bright shining flash which left the Earth at the speed of light, travelling far into the depth of space.

Our normal experience of time-space is territorial. It is bound to the directions and rhythms of our activities, and determined by our corporeal, ecological, social, and cultural situatedness. The deterritorialized, hallucinatory experience of time and space can move in any direction at arbitrary speed. The slowness of the rock, or the velocity of the flash of light represent two poles of transformed time experience. On the one hand, time explodes in a moment, on the other hand, time is a sedimented, has almost motionless duration. Deterritorialized and psychedelically reterritorialized time unfolds between these two poles and the normal time ceases to exist. It is more complicated to explain the transformation of the space experience, since the space does not originally unfold as a rhythm; rather, it is connected to the perceptual materiality of our body.

In short, there are two basic ways of transforming the space experience: blending and substitution. Blending means that a new, hallucinated space enters the actual surroundings, and you suddenly find yourself in two mixed spaces. For example, I was walking through a field of wheat when a path appeared in front of me leading to a village. I knew that I was still in the field, but I was also approaching the village until the vision disappeared. Substitution means that the actual surrounding space is replaced by another one. The subject is no longer able to recognize any familiar objects and direction, and gets lost. Subsequently, a new, completely different place reveals itself, as if one suddenly found oneself in the hallucinated village, passing through it and meeting someone there.

To properly explain the transformation of time and space, we must connect it with all the other aspects of psychedelic intoxication. Strong waves of biochemical and neural activity run through the body, which shivers and swirls under a stream of emotions, perceptions, feelings, and images that are out of control. The constraints of distinct cognitive fields dissolve and they all mix together. One immerses in the oscillating and vibrating milieu where every detail may open up and reveal its unforeseen connections, speeds, and intensities. Regarding the space, it becomes unclear where exactly I am, what the nature of the place is, and what directions are connected to it. Similarly, regarding the time, I no longer know when I am. Before and after are interchangeable, time may stop or speed ahead turning into a chaotic element of dis-organized duration, and its rhythm is now determined only by the waves of intoxication.

The supra-perceptual level of the hallucinatory field

The rhythm of intoxication becomes the main unifying element of the fully developed hallucinatory trance. A rhythm is a frequency, repetition, or oscillation. The transition to the peak phase which consists in non-perceptual contents resembles a rhythmic change. It is as if a new frequency permeated time-space and mind-body resulting in the further transformation of the whole experiential field, which now vibrates on a frequency scale that reaches far beyond the rhythms of normal cognition. The rhythm I am talking about is obviously not a musical rhythm but a pulsating oscillation of the whole territory. All that the intoxicated person experiences in the peak hallucinatory phase is bathing in the rhythm of the pulsating and transforming stream of reality.

The entire time-space vibrates and oscillates between its limit poles, thus creating a substrate within which the non-perceptual hallucinations begin to emerge. The deterritorialized, synesthetic and intensified perception destabilizes the experienced time and space, lived environment becomes liquid and plastic, turns into an element enveloping the experiencing subject as a kind of atmosphere that renders the subject a part, not the centre, of the all-encompassing field. The subject, immersed in the vibrational materiality of the hallucinatory substrate, can no longer focus on the individual perceptual phenomena. The materiality of this substrate consists in the following ingredients: 1) vibration, oscillation, fluctuation, pulsation; 2) liquidity, indefinability, constant expansion, multiplication, rampant growth; 3) wave-like patterns; 4) immersion, encompassing, absorption; 5) paradoxicality; 6) transparency: de-personified experiential flow is aware of itself.

Within the chaotic, but not completely random dynamics of this substrate, hallucinatory "visions" start to emerge, the contents that are not just visual or imaginary, since in themselves they concentrate the entire previous course of intoxication. These visions are not arbitrary products of imagination brought about by subject's will; they are embodied, deeply involving hallucinatory phenomena which come without warning, autonomously, and pop up like flowers from a substrate. They are autonomous but not arbitrary since they are formed in the process of confrontation with myself and my situation. On the first level of the hallucinatory field, the subject enters (simultaneously distancing itself from it) its personal situatedness while the hallucinatory activity intuitively and with surprising precision concentrates on the important nodes in the personal network: habits, emotions, remorse, guilt, sexuality, fear, etc

Falling deep into the personal web, one finds out that the entered milieu has no end and no bottom, that it continues to advance while the subject becomes a part of still wider relational networks. The fabric of personality ~~in~~ now embedded in the fabric of the environment, and, eventually, in the fabric of all there is. One experiences oneself as a node in the webs of the world, which opens up and extends beyond normally experienced time-space. It feels like acquiring a new body, a body of multiple intermingling lines to which one is connected, a relational inter-body from which one emerges. The subject of experience dissolves and transforms into the paradoxically removed and involved core of connections. It becomes impossible, during this phase, to differentiate between me and the world, between the inner and outer reality. Inner motives are projected to outer space which bends, vibrates, and transforms under the impact of the interwoven hybrid (percepts-affects-symbols-thoughts) cognitive contents, whose origin is untraceable. As the external time-space deterritorializes, the inner expanse behind the closed eyes reterritorializes. The hallucinatory substrate becomes the source of the fractal-like growth and multiplication of hybrid contents, which bring together physical feelings, perceptions, emotions, narratives, and symbols. Sceneries and events of various nature start to unfold inside the hallucinatory landscape: some originating in memory (not necessarily in the personal one), while others have never been seen or thought about before

The typical example is the vision during my very first LSD session. In the beginning, I was gripped by fear because I did not know what would happen. As I was gradually dragged down by the hallucinatory stream, it seemed to me that the descent would never end and that I would fall to a place of no return. When I lied down and let the experience run its course, my fear transformed into a giant dragon muzzle that was ready to devour me. The more I strug-

gled, the pressure in the head grew stronger until I had to surrender. After that I was devoured by a mythical Hydra with endless number of heads and bodies. These bodies were bodies of reality and everything was hidden within their serpentine folds.

This typical supra-perceptual hallucination starts with an embodied emotion, undergoes the process of confrontation with the inner motives, then turns into an imaginary and often symbolic event, which in turn resonates with all the previously developed layers of the psychedelic field. Regarding the extent, types, individual variability, stage of development, and intensity, the domain of psychedelic visions is inconceivably rich. Despite many attempts to systematize and categorize them, a proper analysis that would consider the complex, multi-layered structure and dynamics of our experience and show how hallucinations relate to the entire complexity of our situatedness is still lacking in psychonautic literature. Such analysis should, instead of cataloguing types of content, work with the individual experiences and explain how even the most unusual hallucinations emerge from our intertwining with the world, which necessarily transcends merely personal situatedness.

I will provide an example analysis of this sort on the problem of multiple self[268]. During a common everyday life, one usually experiences oneself as one person, as the united and unitary centre of one's lived world. In fact, our personality is rarely unequivocal, rather it consists of diverse types of behaviour and/or different, interconnected identities, which ideally cooperate but may also come into an unsolvable conflict. The multiple structure of personality may reveal itself during the decentralized and fragmented psychedelic intoxication as was the case of one of my most interesting LSD sessions. I went through the series of hallucinatory visions that I retrospectively divided into four groups[269]: 1) experience of womanhood; 2) experience of childhood; 3)

268 Elster, J. ed. 1986. *The Multiple Self*. Cambridge/Oslo: Cambridge University Press, Norwegian University Press; Lester, D. 2010. *A Multiple Self Theory of Personality.* New York: Nova Science Publishers; Metzinger, T. 2003, *Being No One, The Self-Model Theory of Subjectivity*. Cambridge, MA: The MIT Press; McConnell, A. R. 2011. The Multiple Self-Aspect Framwork: Self-Concept Representation and Its Implications*. Personality and Social Psychology Review,* 15 (1): 3–27.

269 I draw here from the post-psychoanalytic theory of A. S. Wittemann who contends that 'all the inner personalities that we can meet in the inner world of humans may be divided into five fields, five continents of the soul: man, women, animal, child, and god." The degree of correspondence between the described experience and his theory is remarkable. See Wittemann, A. 2013. *Warum wir erst*

experience of manhood; and 4) experience of animality. Each group represents a configuration of several related motives originally scattered and fragmented, but eventually creating consistent narrative lines

The first series, related to womanhood, started already on the bodily level when, during the onset phase, I began to feel the growing pressure around groins and loins, which forced me to take the position of a woman giving birth while standing. After that, the vision of birth arrived, followed by the meeting with the new born child and bonding to it including identification with maternal anxiety. Later, this anxiety transformed into a feminine fear of masculine violence and dominance accompanied by fleeting images of abused, raped, and tortured women. Then, this fear mutated again into the feeling of hopelessness, hatred and rage which unexpectedly morphed into a vision of a harem decorated with lace curtains, ornaments and jewels, filled with perfume scent and overflowing sexuality of female bodies while the sexuality became the source of women's power over men. Later, the feminine line peaked in the visions of women's defiance and leadership crystallizing in the figure of the victorious fighter princess standing over the hailing army.

Second, less rich group, included confrontation with the child aspect, following the hallucinatory experience of giving birth and bonding maternity. I felt child's desire for his mother, the desire to be fed and held in mother's safe arms, which instantly changed into the fear of separation and loneliness accompanied by visions of abandoned and crying children. The childhood series peaked in the terrifying images of children dying under the debris of a bombarded building.

The third, animal line, was the shortest consisting in a single episode which was however intensive enough to resonate throughout the whole hallucinatory field. It arose in consequence of several difficult experiences of pain, sex, suffering and death. It started as an unbearable pressure in my head connected to the feelings of disgust, horror and defiance mixed together with guilt, deficiency, and futility face to face death. A dark grumble slowly rising inside me turned into a loud growling, and finally into an uncontrollable roar which I had to silence in a pillow. Within this roar, which permeated my whole being, the empowering and liberating awareness of aggression and power emerged accompanied by fleeting images of claws and toothy muzzles.

The fourth, masculine line, was less visual and less emotionally demanding, consisting mostly in the inner dialogue with the rational aspect. However, it also included an imagery related to the previous series. One of them started with

anfangen uns selbst ze verstehen: Die architecture der Innenwelt. Bielefeld: Kamphausen.

the child's desire for mother and resulted in the meeting with a strange man, a vagabond who cares only for shelter and food. It was this kind of a doggish character of low intelligence, low self-esteem, and no expectations, just waiting for someone to take care of him. He was also greedy and selfish, seeking only immediate pleasure.

The second narrative part of the masculine series was the vision of a space cadet and his life on a battle spaceship. The scene started with the cadet taking a training at a military base camp wherefrom he was transferred onto the spaceship. When he arrived on the spaceship, a battle started. The cadet had to suit up and move to his combat position in the shooter's cabin. Then he started to fire the laser weapon trying to eliminate as many enemy fighters as possible. After the victorious battle, the whole battleship crew gathered at the battle deck to witness the arrival of the conquering fighter princess.

The masculine series were, both in positive and negative sense, connected to the motives of control over one's life, taking up initiative and fight. These motives were bound to a cold, rational voice airing doubts about the whole psychedelic business. It was imbued with the need to conceptualize everything and gain rational control over the fantastic content of other lines which the voice considered to be illusory and unreal. Later on the voice began to prompt me to be more decisive and hard-working to hold up to others and secure myself and my family.

This description shows several key aspects of the hallucinatory phase:1) The hallucinatory content, at least to some extent, relates to the structure of personality. The psychedelic effect takes up important psychological motives, externalizes them, expands, and enriches them to finally transform them into embodied imaginary narratives. 2) In the hallucinatory phase, the unitary self dissolves and the subject is confronted with seemingly alien and phantastic hallucinatory content whose origin lies not in the person itself but in the wider situatedness. In this phase, the subject is forced to surrender its control over the experience and accept the inner multiplicity. 3) The expansion and enrichment of hallucinatory contents, the fact that I am confronted with visions that did not originated in my previous experience shows that our minds are wider than we normally think. They are intertwined with a semiotic network that is independent on the subjective consciousness. 4) A fully developed psychedelic experience is not controlled by the central self. Our experience process changes into a multi-layered event, into a rhizomatic multiplicity which self-organizes not around the self, but around certain configurations. Psychedelically disorganized experiential stream ceases to be in my possession and becomes an autonomous element. The self then represents one of its configurations, among many others.

A configuration (or a cognitive schema) is always bound to embodied experience, yet during the trance, the connection to its origin is untied, and the configuration presents itself as an autonomous motive. Let's take the phenomenon of pleasure as an example. In a waking state, we experience pleasure as firmly bound to a specific situation, but during a psychedelic intoxication, the pleasure may present itself as an autonomous principle, independent of my actual previous experiences. At first, one may experience waves of physical pleasure permeating one's body. In the following course, it transforms into an imaginary narrative comprising such aspects as removing the pressure, feeling relief, success, empowerment, liberation, and other pleasure-related motives, similarly as in the visions of giving birth, sexuality, mother's arms, victory, etc. Yet, a configuration is nothing like a pure idea, it does not present itself as a closed and complete entity but as an open working principle surrounded by chains of associations and related neighbourhoods. It is thus typical that the experience of pleasure is closely interconnected with its counterpart, the experience of pain, similarly to the experience of animality as opposed to the experience of rationality, or the female aspect with the male, etc. The wave-like, pulsating hallucinatory substrate causes that the opposites and neighbouring motives may rapidly transform one into the other.

Our experience, seen from the psychedelic perspective, presents itself as an autonomous element, and the subject is involved in it as if it was one of its configurations. The process of experiencing as such reveals itself as a self--sustaining element lacking the central ego control, and it self-organizes around the hybrid forms which vertically interconnect various experiential layers with horizontally related and neighbouring motives. Configuration can be also called an attractor, since it attracts deterritorialized awareness and fuses together distinct experiential layers. An attractor presents itself at first as a specific theme – a memory of a woman, a melody, an encounter with something or someone significant to the extent that it can initiate the process of analogical transference and rampant spread of associations.

Alloy

To sum up the previous interpretation: During the peak, the hallucinatory phase of the psychedelic session, I am no longer the master of my experience. I spread up within the wave-like oscillatory substrate of hallucinatory field, which self--organizes around the attractors. The attractors present themselves as the oscillating nodes embedded in the network of our wide contextuality. The attractors

emerging from this context allow, thanks to the transparency of experience, to perceive the contextual embeddedness itself. The dissolution of the default controlling structures of consciousness, as well as our sober being in the world, results in uncovering the experiential field as an autonomous streaming element within which the self stands as one of its configurations, not as the source of experience.

Based on this interpretation of psychedelic experience, we may consider the human nature as multi-layered, multiple, and processual. Psychedelics show that our experience emerges from the preceding complexity of intertwining, from the events and processes that are pre-conscious, subconscious, and non--conscious. We are embedded within the bearing processual elementarity of various environments and lines of events, which we co-create by our presence. We are included in (and co-create) the materiality of biochemical processes, physiological actions, and neural networks. We are embedded within the materiality of our bodies that are complex living systems involved in their environments via perception and metabolism as its distinct, but constitutive parts. We are included in ecological processes that form our environments, as well as the cultural processes of language and artefact making.

Each of these contexts has its own structure and dynamics. Individual beings are nodes of interconnections, pulsating and open cores that bring together events from diverse levels. A unity of each being does not lie in its essence but in its territory, in the lived milieu, a niche which emerges, exists, and perishes thanks to the rhythms of our embodied negotiation and sustenance. To say that the key aspect of psychedelic experience is deterritorialization means, to put it metaphorically, that our entire tonality and rhythms of our existence gets dis-tuned and over-tuned by the rhythms and tonality of the vast relational time-space – the web of webs, intertwining or being. Thanks to that, we can perceive ourselves as configurations organized around multiple centres, directed to multiple directions, and permeated by various lines of events. Deterritorialization means that my knot in the web of webs was unravelled, and our naked awareness, stripped of its habitual and sedimented constraints, is confronted with the wider, deeper, and older relationality.

The idea of the complete unravelling stands in relation to another threshold and respective phase transition within the psychedelic field behind which the widest and deepest experiences may unfold. T. B. Roberts designates them as the "mightily overwhelming states of united consciousness". According to him, these states occur in one tenth of psychedelic sessions, depend on high doses of an effective substance and their significant core lies in the concept of unity. B. Sessa describes such experiences as follows:

> *Often called 'oceanic boundlessness', the psychedelic experience can trigger a sense of being part of a much wider entity than the traditional boundaries of personhood. One no longer defines oneself as simply a doctor, a father or mother, a husband or wife, a friend, neighbour, or citizen; rather, one is a leaf on a tree, a drop of water in a lake, a breath on the wind. There is a plethora of vibrating energy moving like electricity through all things and one feels that one is part of it. One intuitively knows there is a cyclical balance to life that stretches back through time to the very origin of the universe and one is able to experience one's part in it. Paradoxically, one may be as large as the universe and as small as the most elemental particle at the same time – everywhere and nowhere, inside and outside, alive and dead, timeless and historically rooted in time*.[270]

When Sessa describes the experience of unity further, he states that its main aspect is "*the sense of merger. Inside can merge with outside, self can merge with others, the Earth can merge with the universe, and so forth*"[271]. He also speaks about "*losing one's sense of physical boundaries, one's ego and one's place in time. Those confining structures (time and space) become meaningless concepts as one merges with the wholeness greater than one's self*"[272].

Reports of similar experiences are quite common both in literature and in psychonautic trip reports. The rich database of such reports, the Erowid, offers, for example, the following descriptions:

> *I can feel the fabric of the universe because I am part of it. This feeling of unity with the universe is both horrifying and tranquil. The horrifying part is that I no longer have any idea what 'Me' is. I know what I am. I am I. At no point did I stop existing; rather, I stopped existing as me. I simply became I. I just am. Nothing more, nothing less*.[273]

> *I get the feeling I'm totally at one with the universe. It is total euphoria, I am in some sort of state of spiritual nirvana. My physical body, and the physical world not only doesn't exist, it's been totally forgotten. The only thing that matters*

270 Sessa, B. 2012, p. 20.

271 Ibid., p. 21.

272 Ibid., p. 22.

273 Boogeyman. 2011, *Sally knows best, An experience with Salvia Divinorum* [online]. www.erowid.org. Accessible from https://www.erowid.org/experiences/exp.php?ID=68077.

> *now is pleasure and pure happiness. I am living purely for the moment, and this moment is eternity*.[274]
>
> *I lost awareness of my body, my surroundings, everything around me. I felt myself fall right through the earth, like a neutrino, like the earth was nothing but empty space. I left my body completely and dissolved into universe. My mind became place into the mind of the universe, expanded to it, knowing everything to known, but completely unable to think in thoughts, words, my mind-voice was completely gone, yet I was completely aware of ideas, knowledge, wisdom, abstractions which were so perfectly clear and understandable to me outside of any known constructs of language, way beyond language, completely non-linear thought and yet not-thought. Just knowing. Pure knowing. My mind, my consciousness, my poor little brain struggled to keep up with it, struggle to keep up with everything streaming in, struggle to fit the mind of the universe within in*.[275]

These descriptions offer us several motives as the features of the psychedelic domain's final stage: 1) merger, 2) boundlessness, 3) expansion, 4) universality, 5) de-personification and the loss of the world, 6) intuitive knowledge beyond language

The previous phase resulted in the dissolution of personal unity in the semiotic network organized around attractors. The dissolution is a pre-requisite of the merger. As the personal self dissolves, only the pure awareness remains, devoid of intentionality, awareness of awareness. Consciousness is no longer limited to who, where and when I am, and expands across the hallucinatory reality turning into an endless point of presence which is no longer bound by the confining structures of space and time. The awareness appears to itself as merging with the cosmic context in an eternal moment. This moment transcends our separated existence towards the undivided, non-dual experience of a drifting, self-sustaining stream of knowledge beyond language; we have arrived at the state of alloy: alloy of lines, layers and levels merged into a pulsating singularity of the pure presence.

Such experience of fusion and unification presupposes that the dynamics of the developed hallucinatory field is complex. Boundlessness and expansion towards the cosmic context represents the final stage of psychedelic deterri-

274 Peter Pumpkin. 2005. *Revelations, Cosmic Unity, Entity Contact: An experience with mushrooms – Psilocybae mexicana, alcohol and cannabis* [online]. www.erowid.org. Accessible from https://www.erowid.org/experiences/exp.php?ID=42367.

275 Netrunner 2004. *The Power and the Glory: An experience with harmalin, 5-MEO--DMT & DMT* [online]. www.erowid.org. Accessible from https://www.erowid.org/experiences/exp.php?ID=34866.

torialization and reterritorialization. Confining and bounding territoriality of my normal experience is pushed back and forgotten. Self-awareness expands towards the outside and vice versa, both merge in the moment of undivided identity. From now on, at least for a while, the beam of awareness may move freely, like a flash, through hallucinated expanses of the universe, dive into an arbitrary detail and bear all the heaviness and emptiness of being. In this manner, we are confronted with the utmost context of our existence, the cosmic one. Such unitive experiences are the links to the fact that our conscious being is carried by the encompassing elementarity of the intercorporeal intertwining of life, which is necessarily a cosmic phenomenon. It means, from the perspective of experimental psychonautics, that the utmost setting of each psychedelic session is cosmos.

Fading of effects

> *When I came around I felt an immediate and overwhelming sense of relief; a return to the clear ego-bound constraints of organised reality. My mind state was still altered but the shifting sands of existential anxiety had stopped. It was essentially a rebirth following the mythic fragmentation of ego-dissolution.*[276]

This is how T. Slater describes the final phase of his LSD experience. He volunteered to participate in an experimental study in London, which included brain scanning and imaging. His experience was extraordinary even for a seasoned psychonaut, since he was injected LSD intravenously and the whole session was ended prematurely by benzodiazepine. The session had to be terminated when his experiential field started to transform in the hallucinatory one; the experiment facilitator turned into a wolfish beast, surrounding objects seemed alien and incomprehensible, his entire time-space began to morph and disintegrate, inducing fear and confusion which became unbearable to the extent that he decided to flee the experimental room. The facilitator had to catch him and terminate the session

Slater's final relief, as he returned to the unaltered state, clearly characterizes the two fundamental aspects of the last phase of each psychedelic experience: the return to the ego-bound constraints of organised reality, and the fading of the effects. This final stage is of the same importance in interpretation of psychedelic experiences as all the previous ones. The process of returning and

276 Slater, T. 2014. *The LSD Trial.* Psychedelic Press UK, Volume 5. Falmouth: PsychedelicPress, p. 90.

integration lets the boundary between the sober and intoxicated state came out in a specific way. I will explain it using the analogy of a flood. Each psychedelic experience resembles a flood wave. It starts with the onset, grows stronger, culminates, and fades away. As the psychedelic effect fades away, one's mind and body slowly returns to the previously known, habitually fixed terrain. Yet, after the flood hardly anything remains exactly as it was before. Some barriers were carried away, some fell down, some survived. After the flood, the old river bed is transformed, extended, and the water might even find new directions. The landscape is already calm but full of debris, unsettled. It will take some time before everything settles back to normal or finds a new place. Psychedelic intoxication reminds me of a flood in our experiential territory.

The immediate fading thus entails cooperation between several processes. Cessation: the intensity of the experience weakens, transformed perceptions disappear, the majority of effects withers away. The experiential field grows calm, movements such as oscillation, pulsation, and vibration cease to be apparent. The return to normal frequencies and levels is usually accompanied by a great loss of energy because organism's water and mineral supplies were burned in the flames of trance.

Reinforcement: Previously dissolved cognitive structures are reinstated, one gains control over one's experience back. The complete return to normal functioning may take tenth of minutes or several hours depending on the character of the session and setting. During this time, one slowly returns from the far, wide, and deep expanses of the hallucinatory field back to the familiar shape of one's territory. The fluid, expansive magma of the hallucinatory stream is cooling down, and passed experiences are being built into the constraints of our habitual ways of acting, perceiving, and thinking. Thoughts are again under the rule of language. Yet, the hallucinatory memories still strongly resonate, however rapidly they fade and disappear. In this stage of the fading process, one often starts to ask the question: What has just happened? What have I been through? What does it all mean? The final accounts are being settled, dead and alive are counted after the battle. What was unravelled is plaited again, what was disconnected reconnects, what was pushed back returns to the fore, and what stepped to the front falls back to the background.

Sobering and returning is, however, never easy, and one must count with the reverse impact of the normalized flow of experience. Integration of such an impact requires a relatively long time, it becomes the matter of a long-time negotiation with the difficult and shattering hallucinatory contents, which can still erode the previously acquired understanding of ourselves and the world.

We can illustrate this situation using the famous Alice's encounter with the caterpillar, a classic psychonautic reference.

> *The Caterpillar and Alice looked at each other for some time in silence: at last the Caterpillar took the hookah out of his mouth, and addressed her in a languid, sleepy voice.*
>
> *'Who are you?' said the Caterpillar.*
>
> *This was not an encouraging opening for a conversation. Alice replied, rather shyly, 'I – I hardly know, sir, just at present – at least I know who I was when I got up this morning, but I think I must have been changed several times since then'.*
>
> *What do you mean by that?' said the Caterpillar sternly. 'Explain yourself!'*
>
> *'I can't explain myself, I'm afraid, sir' said Alice, 'because I'm not myself, you see.'*
>
> *'I don't see,' said the Caterpillar.*
>
> *'I'm afraid I can't put it more clearly,' Alice replied very politely, 'for I can't understand it myself to begin with; and being so many different sizes in a day is very confusing.'*[277]

Alice's confusion and uncertainty about her identity corresponds quite precisely to the fading phase when one is coming back from the experience of multiplicity to the solid unitary, ego-bound reality because hardly anything seems like before. Once the landscape of experience, the "system me-things-world", as Merleau-Ponty calls it, has been disrupted and problematised, it becomes impossible to simply return to the naive and innocent view of the world, as it is impossible to return to one's innocence after having sex. The resolution of this conflict remains an individual task for each psychonaut. My attempt to integrate my hallucinatory journeys resulted in drafting this book. But I am probably still on the way.

277 Carroll, L. 2005. Alice's Adventures in Wonderland. Webster's French Thesaurus Edition. San Diego: Icon Classics, p. 28.

Summary and conclusion

The painful process of writing this book can be summarized as follows. This text does not present an objective description of psychedelic experiences, as this would contradict my main argument anyway. Rather, it presents a hermeneutic process when the field of experience enters the field of writing and the writing becomes a part of experience as it entails integration. The writing process consisted in the gradual appropriation of language and theoretical tools that would adequately express things that I initially had not thought about. I had to learn how to shape words to bring experiences that transcend language into a literary form.

To illustrate the writing process, I will, for the last time, dive deeper into the hallucinatory field to evoke[278] some of its contents. Within the deep trance states, the intoxicated subject finds itself in an amorphous and liquid environment that does not consist of familiar well-defined contents, but of streaming lines and morphing no-shapes of an uncertain origin. Inside such an environment, strange, unusually complex, and abstract configurations may begin to take form. They may resemble otherworldly beast-machines, gigantic living engines, enormous transformers, fractal pulsars, or organic entities of mixed nature, animals-plants-crystals.[279] The peculiar urgency of these configurations complicated my process of writing, since I did not know how to describe them until I realised that I could draw them.

278 Evocation as a part of writing strategy, see Bochener, A., Ellis, C. 2016. *Evocative Autoethnograpy: Writing Lives and Telling stories*, New York / London: Routledge; Short, N. P., Turner, L., Grant A., eds. 2013. *Contemporary British Autoethnography.* Rotterdam: Sense Publishers.

279 Such configurations are frequently pictured in contemporary visionary art which, together with psychedelic music, supported my proces of writing. See Grey, A., What is visionary art? [online]. alexgrey.com. Accessible from http://alexgrey.com/media/writing/essays/what-is-visionary-art/; Caruana, L. 2010. *The First Manifesto of Visionary Art*. Recluse Publishing.

How does this, however, relate to the problem of writing? In my view, to think from psychedelic experiences means to construct the text in accordance with the structure of the described experiential field, which may present to me gigantic chaotic machines or indescribable organic entities. In terms of writing, I had to ask myself what type of machine is this text going to be? What type of configuration? Eventually, I arrived at the following shape:

Imagine this text as an interconnection of several methodological rings and explanatory lines. The methodological rings which hover one above each other horizontally include: transdisciplinarity, autoethnography, enactivism, phenomenology of corporeality, ecosemiotic, cognitive anthropology, weaving method, and rhizomatic thinking. This tube-shaped configuration is interwoven with the vertical fibres of individual analyses and descriptions: pharmaco--analysis, analysis of the relation between the nightlife and the working day, conceptual analysis, analysis of alkaloid's biochemistry, description of neurotransmission and entropic organisation of brain functions, modelling of psychedelic domain.

When thinking from psychedelic experiences, it was also necessary to define the concept of experience so that it would include psychedelic processes. That implies that a psychedelic experience must be interpreted relatively to the wide human situatedness which needs to include the possibility of altered experiential processes such as dreaming, intoxication, or psychic disorder. In this text, I define human experience as an autopoietic embodied activity of a person in its ecological and socio-cultural environment. Experience is a situated, embodied, and distributed activity taking place within various interconnected contexts – cosmic, ecological, historical, corporeal, socio--cultural, and so forth. The activity of experience is possible and thinkable solely within specific contexts as it emerges from them and permeates them at the same time. Experience is a cut through the intertwining, with this cut a being opens itself for awareness. Psychedelic experiences show that this cut can be pharmacologically extended.

A special place in the configuration of this text pertains to the Deleuze--Guattari ring comprising fragments from the *Thousand Plateaus*. Drug experiences are not only thematised in this book-machine, but they had also undoubtedly inspired it. Deleuze and Guattari allowed these experiences to enter their writing. They took pieces of intoxicated codes and reterritorialized them for their own purposes. For them, a drug is an experimental tool in the following sense: "*The drug LSD is a chemical means of plunging oneself into the depths of pure intensity, on an almost vertical gradient, almost parallel to that of schizophrenic – therein lies its experimental (clinical) value and the correlated (critical significance) of Artaud to Foucault and Deleuze alike. It represents a possible means of experimentation in Alice-like free-fall and the opportunity to crash test fictionality into the wall of material thought*"[280]. For me, to put it

280 Boothroyd, D. 2006. *Culture on drugs. Narco-cultural studies of high modernity*. Manchester and New York. Manchester University Press, p. 177.

shortly, the experimental and critical value of psychedelics relates to the nature of intoxication which throws the experiencing subject back to itself and, at the same time, tears it out of itself in one paradoxical movement that involves absorption, as well as transparency allowing for the shift in perspective.

This text, to use Deleuze's expression, is a-significant machine; it does not represent reality but connects to reality through analogy. It does not say what psychedelic experiences are, but how they transpire, what contexts they emerge from, what they produce, how they make connections to other threads of intertwining, and what layers of being they permeate. This text does not seek to present a truth about psychedelic experiences. Instead, it attempts to mediate a shift in perspective: from the isolated self and the state (of consciousness) to the contextual situatedness, field and process.

Such shift, in terms of writing, implies necessary bending of language. A processual thinking beyond the principle of identity comprehends concepts as bunches of analogies, hence it must make them move and dismantle the seemingly firm units of meaning. For this reason, this text does not care whether the word drug, psychedelic substance, hallucinogen, plant, alkaloid, or any other suitable expression is used. That is also why this text prefers the term experience to that of consciousness as it speaks about the processes of deterritorialization, reterritorialization, analogical transference, and modelling rather than about the states of consciousness. It thinks in dynamic terms of lines, layers, and levels, rather than in terms of persons, states and things however unavoidable they are. Its focus is on constructing nodes, configurations, or attractors, and enlivening the language with synesthetic words like oscillation, intensification, vibration, or transformation. This text is not interested in stable identities but in permeations, intertwinings, and alloys.

Last but not the least, this text wants to contribute to the contemporary discussion on the 'psychedelic renaissance'. Nowadays, the return of psychedelics to science advances by mile steps; the number of studies, dissertations, articles, and monographies published every year amount to thousands. International psychedelic conferences are being held worldwide, and psychedelic societies in many countries are spreading the word as the various types of psychedelic praxis continue to flourish around the globe. This text represents an attempt to put together a few lines running through this rich terrain, to create a connecting node, an attractor for future disputes.

References

Adamson, S., ed. (1986). *Through the Gateway of the Heart: Accounts of experiences with MDMA and other Empathogenic Substances.* San Francisco: Four Trees Publications.

Agurell, S., Dewey W., L., Willette, R. E. (2012). *The Cannabinoids: Chemical, Pharmacologic and Therapeutic Aspects.* Orlando: Academic Press.

Alexander, B. C. (1997). *Ritual and current studies of ritual: overview*. In Glazier S. D., ed. (1997), s. 139–160.

Anderson, L. (2006). Analytic autoethnography. *Journal of Contemporary Ethnography, 35*(4), 373–395.

Anderson, L. W., ed. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives.* New York: Longman.

Andrle, M. (2010). *Whiteheadova filosofie přírody.* Praha: Pavel Mervart.

Aniszewski, T. (2007). *Alkaloids – The Secrets of Life; Alkaloid chemistry, biological significance, applications and ecological role.* Amsterdam/Oxford: Elsevier.

Arendt, H. (1971/1978). *The Life of the Mind. Volume One. Thinking.* San Diego: Harcourt Brace Jovanovich.

Aristotelés (1993). *Poetika.* Přel. F. Groh. Praha: Gryf.

Bache, C. M. (2000). *Dark Night, Early Dawn. Steps to a Deep Ecology of Mind*. Albany: State University of New York Press.

Ballabh, P., Braun, A., & Nedergaard, M. (2004). The blood-brain barrier: an overview: structure, regulation, and clinical implications. *Neurobiology of Disease, 16*(1), 1–13.

Barabe, P. (1982). La Religion d'Eboga ou le Bwiti des Fanges. *Medicine tropical, 12*(3), 251–257.

Barbaras, R. (2005). Desire and Distance. Introduction to a Phenomenology of Desire. Translated by Paul B. Milan Redwood City: Stanford University Press.

Bartha, P. (2013). *Analogy and analogical reasoning* [online]. Stanford Encyclopedia of Philosophy; http://plato.stanford.edu/entries/reasoning--analogy/#AriThe.

Baudelaire, C. (2009). *Umělé ráje.* Přel. P. Himmel. Praha: Garamond.

Bauman, Z. (2006). *Úvahy o postmoderní době.* Přel. Petrusek, M. Praha: SLON.

Bender, A., Hutchins, E., & Medin, D. (2010). Anthropology in Cognitive Science. *Topics in Cognitive Science* (2/2010), 374–385.

Benjamin, W. (2006). *On Hashish.* Cambridge/London: The Belknap Press of Harvard University Press.

Bennardo, G., Kronenfeld, D. B. (2011). *Types of collective representations: Cognition, Mental Architecture, and cultural knowledge*. In Kronenfeld, D. B., Bennardo, G., de Munck, V. C., Fischer, M. D., eds. (2011). *A Companion to Cognitive Anthropology.* Chichester: Wiley-Blackwell.

Bernet, R., Kern, I., Marbach, E. (2004). *Úvod do myšlení E. Husserla.* Přel. P. Urban. Praha: Oikoymenh.

Berrios, G. E. (1996). *The History of Mental Symptoms. Descriptive psychopathology since the nineteenth century.* New York: Cambridge University Press.

Beyer, S. V. (2009). *Singing to the Plants. A Guide to Mestizo Shamanism in the Upper Amazon.* Albuquerque: University of New Mexico Press.

Biocca, E. 1965. Yanoáma. Dal Racconto di una donna rapita dagli indi. Bari: Leonardo da Vinci Biro, S. (2011). *Hellucination. A memoir.* USA: Unearthed Books.

Black, D. (1998). *Acid: The Secret History of LSD.* London: Vision.

Bloom, B. E. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York, Toronto: Longmans/Green.

Bohlen und Halbach, O. von, Dermietzel, R. (2006). *Neurotransmitters and neuromodulaters. Handbook of receptors and Biological effects.* Weinheim: WILEY-VCH Verlag.

Bochener, A. E. (2016). *Evocative Autoethnograpy: Writing Lives and Telling stories.* New York / London: Routledge.

Boogeyman. (2011). Sally knows best: An experience with Salvia Divinorum [online]. *Erowid Experience Vaults, www.erowid.org*; https://www.erowid.org/experiences/exp.php?ID=68077.

Boothroyd, D. (2006). *Culture on drugs. Narco-cultural studies of high modernity.* Manchester and New York: Manchester University Press.

Boys, A., L. S., & Norcross, K. (1997). Polydrug use at raves by a Western Australia Sample. *Drug and Alcohol Review, 16*(3), 227–234.

Bravo, G. l. (2001). What does MDMA feel like? In Holland, J. (2001). *Ecstasy: The Complete Guide*. Rochester: Park Street Press, s. 21–28.

Brown, J. D. (2009). Psychedelics and Ecology. *MAPS Bulletin, XIX* (1).

Brown, J. D. (2013). *The New Science of Psychedelics. At the Nexus of Culture, Consciousness and Spirituality.* Rochester / Vermont / Toronto: Park Street Press.

Brown, V. A., Harris, J. A., Russel, J. Y., eds. (2010). *Tackling Wicked Problems. Through the Transdisciplinary Imagination.* London/Washington: Earthscan.

Bruner, E. M. (1986). *Experience and its expression*. In Bruner, E. M., Turner W. V., eds. (1986). *The Anthropology of experience*. Urbana/Chicago: University of Illionis Press, s. 3–32.

Budil, I. (2003). *Mýtus, jazyk a kulturní antropologie.* Praha: Triton.

Cameron, A., Luke, D., Waldstein, A., Sessa, B., King, D. (2013). *Breaking Convention. Essays on Psychedelic Consciousness.* London: Strange Attractor Press.

Caroll, F. I., Lewin, A. H., Mascarella, S. W., Seltzman, H. H. (2011). Designer drugs: A medicinal chemistry perspectives. *Annals of the New York Academy of Sciences, 1248*(1), 18–38.

Carroll, L. 2005. Alice's Adventures in Wonderland. Webster's French Thesaurus Edition. San Diego: Icon Classics.

Carthart-Harris, R. L., Leech, R., Tagliazucchi, E., Hellyer, P. J., Chialvo, D. R., Feilding, A., & Nutt, D. (2014). The entropic brain: A theory of conscious states informed by neuroimaging research with psychedelic drugs. *Frontiers in Human Neuroscience*, 1–64.

Caruana, L. (2010). *The First Manifesto of Visionary Art.* Recluse Publishing.

Cassegard, C. (2004). Fear, desire and the ideal of authenticity: antinomies of modernity in the works of Abe KôBô and Martin Heidegger. *Africa & Asia, 5*, 3–24.

Cohen, E. (2010). Anthropology of Knowledge. *Journal of the Royal Anthropologcial Institute, 16*, 193–202.

Collins, R. L., Ellickson, P. L., Bell, R. M. (1998). Simulatenous polydrug use among teens: prevalence and predictors. *Journal of Substance Abuse, 10* (3).

Cooper, K., White, R. E. (2012). *Qualiative Research in the Post-Modern Era. Contexts of Qualitative Research.* Dordrecht / Heidelberg / London / New York: Springer.

Halberstadt a další. (2015). Recent advances in the neuropsychopharmacology of serotonergic hallucinogens. *Behavioural Brain Research, 277C*, 99–120.

Dammbeck, L. (2005). *Das Netz – die Konstruktion des Unabombers.* Hamburg: Edition Nautilus.

Darbelay, F., Cockell, M., Billotte, J., Waldvogel, F., eds. (2008). *A Vision of Transdiciplinarity. Laying Foundations for a World of Knowledge Dialogue.* Lausanne: EPFL Press/CRC Press.

Davies, M. (2003). The Role of GABA receptors in mediating the effects of alcohol in the central nervous system. *Journal of Psychiatry and Neuroscience, 28*(4), 263–274.

Davis, H., Turpin, E. (2015). *Art in the Anthropocene. Encounters among Aesthetics, Politics, Environment and Epistemologies.* London: Open Humanities Press.

Deleuze, G., Guattari, F. 1987. *A Thousand Plateaus. Capitalism and Schizophrenia*, Minneapolis/London: University of Minnesota Press

Depner, B. (2000). *Sympoietic and Autopoietic Systems: A New Distinction for Self-organizing Systems.* Waterloo: University of Waterloo.

Dietrich, A. (2003). Functional neuroanatomy of altered states of consciousness: The transient hypoftrontality hypothesis. *Consciousness and Cognition*, 12: 231–256.

Dobkin de Rios, M. (2009). *The Psychedelic Journey of Marlene Dobkin de Rios. 45 years with Shamans, Ayahuasceros, and Ethnobotanists Rochester/Vermont/ Toronto, Park Street Press.* Rochester/Vermont/Toronto: Park Street Press.

Duncan, D. F. (1982). *Drugs and the Whole Person.* New York: John Wiley & Sons.

Elster, J., ed. (1986). *The Multiple Self.* Cambridge/Oslo: Cambridge University Press, Norwegian University Press.

Eremitus, A. (2009). *The Psychedelic Tarot.* New York/Bloomington: iUniverse, Inc.

Fabian, J. (2001). *Anthropology with an attitude: critical essays.* Stanford: Stanford University Press.

Fadiman, J. (2011). *The Psychedelic Explorer's Guide. Safe, Therapeutic, and Sacred Journeys.* Rochester, Toronto: Park Street Press.

Fairfield, M. (2004). Gestalt Groups revisited: A Phenomenological Approach. *Gestalt Review, 8* (3), 336–357.

Faith, K. (2001). *The Long Prison Journey of Leslie Van Houten. Life Beyond the Cult.* Boston: Northeastern University Press.

Favareau, D., ed. (2010). *Essential Readings in Biosemiotics. Anthology and Commentary.* Dordrecht/Heidelberg/London/New York: Springer.

Fernandez, J. W. (1982). *Bwiti: An Ethnography of the Religious Imagination in Africa.* Princeton/New Yersey: Princeton University Press.

Fischer, F. (2015). *Therapy with Substance. Psycholytic Psychotherapy in the Twenty-First Century.* London: Muswell Hill Press.

Fritz, J. (1999). *Rave Culture. An Insider's overview.* Eagle Creek: Small Fry Publications.

Gentner, D., Colhoun, J. (2010). *Analogical Processes in Human Thinking and Learning*. In Glatzeder, B. M., Goel, V., Müller, A. von, eds. (2010), s. 35–48.

Gentner, D., Holoyak, K. J., Kokinov, B. K., eds. (2001). *The Analogical Mind. Perspectives from Cognitive Science.* Cambridge: Bradford Books.

Gerderman, G. L., Schechter, J. B. 2010. Chapter 6: The Endocannabinoid System. In Holland, J. et Al. The Pot Book. A Complete Guide to Cannabis. Its Role in Medicine, Politics, Science, and Culture. Rochester: Park Street Press (ebook)

Giroux, H. A., Giroux, S. S. (2006). Challenging Neoliberalism's New World Order: The Promise of Critical Pedagogy. *Cultural Studies – Critical Methodologies*, *6*(1), 21–32.

Glatzeder, B. M., Goel, V., Müller, A. von, eds. (2010). *Towards a Theory of Thinking. Building Blocks for a Conceptual Framework.* Berlin/Heidelberg: Springer.

Glazier S. D., ed. (1997) *Anthropology of Religion: A Handbook.* Westport, CT: Greenwood Press.

Gordon Wasson, R., Kramrisch, S., Ott, J., Ruck, C. A. P. (1986). *Persephone's Quest: Entheogens and the Origins of Religion.* New Haven/London: Yale University Press.

Goulet, J.-G. A., Miller, B. G., eds. (2007). *Extraordinary Anthropology. Transformations in the Field.* Lincoln/London: University of Nebraska Press.

Gredig, F. (2009). *Finding New Cosmologies. Shamans in Contemporary Europe.* Zürich/Berlin: Lit Verlag.

Grey, A., What is visionary art? [online]. alexgrey.com; http://alexgrey.com/media/writing/essays/what-is-visionary-art/

Grey, C. (2010). *The Acid Diaries. A Psychonaut's Guide to the History and Use of LSD.* Rochester / Vermont / Toronto: Park Street Press.

Grof, S. (1980). *LSD-Psychotherapy.* Alameda: Hunter House.

Grof, S. 1988. *The Adventure of Self-discovery*. New York: SUNY.

Grof, S. (2000). *Foreword*. In Bache, C. M. (2000).

Grof, S. (2009). Holotropic Research and Archetypal Astrology. *Archai: The Journal of Archetypal Cosmology*, *1*(1), 50–66.

Hadorn, G. H. a další, eds. (2008). *Handbook of Transdisciplinary Research.* Berne/Zurich/Basel: Springer.

Haraway, D., Kenney, M. (2015). *Anthropocene, Capitalocene, Chthulhucene. Dona Haraway in conversation with Martha Kenney*. In Davis, H., Turpin, E. (2015).

Hatsis, T. (2015). *The Witches'Ointment: The Secret History of Psychedelic Magic.* Rochester: Park Street Press.

Heaven, R., Charing, H. G., Amaringo, P. (2006). *Plant Spirit Shamanism: Traditional Techniques for Healing the Soul.* Rochester/Vermont: Destiny Books.

Heidegger, M. 1962. *Being and Time*. Translated by Macquarrie, J., Robinson, E. Oxford/Cambridge: Blackwell Publishers Ltd.

Heller, A. (2005). The Three Logics of Modernity and the Double Bind of Modern Imagination. *Thesis Eleven. Critical theory and historical sociology, 81*(1), 63–79.

Hess-Lüttich, E. W., ed. (2006). *Eco-Semiotics. Umwelt- und Entwicklungskommunikation.* Tübingen und Basel: A. Franke Verlag.

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

Hillel, R. A., Israel, T. A., Connolly, G. N. (2015). A study of pyrazines in cigarettes and how additives might be used to enhance tobacco addiction [online]. *Tobacco Control*; http://tobaccocontrol.bmj.com/content/early/2015/05/03/tobaccocontrol-2014-051943.full.

Hobbs, J. (2013). *Drop Acid Not Bombs: Psychedelic weapons at Porton Down*. In Cameron A., Luke, D., Sessa, B. King, D., eds. (2013). *Breaking Convention: Essays on Psychedelic Consciousness*. London: Strange Attractor Press, s. 81–92.

Hoffman, P. L., Rabe, C. S., Grant, K. A., Valverius, P., Hudspith, M., Tabakoff, B. (1990). Ethanol and the NMDA receptor. *Alcohol, 7*(3), 119–231.

Hoffmeyer, J. (2008). The Semiotic Niche. *Journal of Mediterranean Ecology, 9*, 5–30.

Hofmann, A. (1971). *The Discovery of LSD and Subsequent Investigations on Naturally Occuring Hallucinogens*. In F. J. Ayd, B. Blackwell, eds. (1971) *Discoveries in Biological Psychiatry.* Philadelphia/Toronto: J. B. Lippincott Company.

Hofmann, A. (2005). *LSD my problem child: Reflections on sacred drugs, mysticism and science.* Sarasota: MAPS.

Hofstadter, D. R. (2001). *Analogy as the Core of Cognition* [online]. Stanford Presidential Lectures in the Humanities and Arts, *prelectur.stanford.edu*; https://prelectur.stanford.edu/lecturers/hofstadter/analogy.html.

Höschl, C. (1996). Syndrom narušené závislosti na odměně. *Vesmír, 75*(9).

Hunt, G., Moloney, M., Evans, K. (2010). *Youth, Drugs and Nightlife.* Routledge.

Hutchins, E. (1995). *Cognition in the Wild.* Cambridge/London: MIT Press.

Hutchins, E. (2010). *Enaction, imagination, and insight*. In Stewart, J. R., ed. (2010) *Enaction: toward a new paradigm for cognitive science.* Cambridge, MIT Press.

Hutto, D. D. (2013). *Radicalizing Enactivism. Basic Minds without Content.* Cambridge/London: The MIT Press.

Chaney, D. (2002). *Cultural Change and Everyday Life.* New York: Palgrave.

Chang, H. (2008). *Autoethnography as method.* Michigan: Left Coast Press.

Chase, J. M., Leibold, M.A. (2003). *Ecological niches. Linking Classical and Contemporary Approaches.* Chicago and London: The University of Chicago Press.

Chebib, M., Johnston, G. A. (1999). The ‚ABC' of GABA receptors: A Brief Review. *Clinical and Experimental Pharmacology and Physiology, 26* (11), 937–940.

Illich, I. 1971. *Deschooling society*. London: Harper & Row.

Inglis, D. (2005). *Culture and everyday life.* London/New York: Routledge.

Irvin, I. (2014). *Entheogens: What's in a Name? The Untold History of Psychedelic Spirituality, Social Control and the CIA* [online]. Gnostic Media. Potent News; https://potentnews.com/2014/11/12/entheogens-whats-in-a-name--the-untold-history-of-psychedelic-spirituality-social-control-and-the-cia/.

Itkonen, E. (2005). *Analogy as Structure and Process. Approaches in linguistics, cognitive psychology and philosophy of science.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Jaspers, K. 1971. Einführung in die Philosophie. Zwölf Radiovorträge. München/Zürich: Piper

Jensen, R. T., Moran, D., eds. (2013). *The Phenomenology of Embodied Subjectivity. Contributions to Phenomenology. Vol. 71*. Cham / Heidelberg / New York / Dordrecht / London: Springer.

Jörg, T. (2011). *New Thinking in Complexity for the Social Sciences and Humanities. A Generative, Transdisciplinary Approach.* Dordrecht / Heidelberg / London / New York: Springer.

Jünger, E. (1970/2014). *Annäherungen. Drogen und Rausch.* Stuttgart: Klett-Cotta.

Kalekin-Fishman, D. (2013). Sociology of everyday life. *Current Sociology, 61*(5–6), 714–732.

Karch, S. B. (2008). *Pharmacokinetics and Pharmacodynamics of Abused Drugs.* Boca Raton, FL: Taylor & Francis Group.

King, D. (2014). The Epilogenic Model. *Psypress 2014 UK, V*.

Kincheloe, J. L. (2008). *Knowledge and Critical Pedagogy. An Introduction.* Dordrecht: Springer.

Kirchhoff, J. 2002. Die Anderswelt. Eine Annäherung and die Wirklichkeit. Raum, Zeit und Selbst in veränderten Bewustseinzuständen. Klein Jasedow: Drachen Verlag

Kliková, A. (2006). *Teoretické důsledky Uexküllovy nauky o významu a možnosti její reinterpretace*. In Kliková, A., Kleisner, K., eds. (2006).

Kliková, A. (2007). *Mimo princip identity.* Praha: Filosofia.

Kliková, A., Kleisner, K., eds. (2006). *UMWELT: Koncepce žitého světa Jakoba von Uexkülla*. Přel. J. Frei, M. Stella. Praha: Pavel Mervart.

Konik, A. (2009). *Buddhism and Transgression.* Leiden/Boston: BRILL.

Kratochvíl, Z. (2006). *Délský potápěč k Hérakleitově řeči.* Praha: Herrmann & synové.

Kronenfeld, D. B., Bennardo, G., de Munck, V. C., Fischer, M. D., eds. (2011). *A Companion to Cognitive Anthropology.* Chichester: Wiley-Blackwell.

Kuei-Yuan, T. A., ed. (2007). *Monoaminergic Modulation of Cortical Excitability.* New York: Springer.

Lakkof, G. (1993). Contemporary Theory of Metaphor. In Ortony, A., ed. (1993), s. 202–251.

Lattin, D. (2010). *The Harvard Psychedelic Club.* New York: HarperONe.

Lawrence, R. J. (2008). *Beyond Disciplinary Confinement to Imaginative Transdisciplinarity*. In Brown, V. A., Harris, J. A., Russel, J. Y., (2008).

Tackling Wicked Problem. Through the Transdisciplinary Imagination. London/Washington D.C.: Earthscan, s. 16–30.

Leary, D. E., ed. (1990), *Metaphors in the History of Psychology*. New York/Cambridge/Oakleigh: Cambridge University Press.

Leary, T. H., Horowitz, M. (ed.), Marschall, V. (ed.) 1994. *Chaos and Cyber Culture*. Berkeley, CA: Ronin Publishing

Lee, M.A., Shlain, B. (1985). *Acid Dreams. The complete history of LSD: The CIA, The Sixties and Beyond.* New York: Grove Press.

Leri, F., Bruneau, J., Stewart, J. (2003). Understanding Polydrug use: review of heroin and cocain co-use. *Addiction, 98*(1), 7–22.

Lester, D. (2010). *A Multiple Self Theory of Personality.* New York: Nova Science Publishers.

Levine, E., ed. 1971. *Simmel. On Individuality and social forms*. Chicago: Chicago University Press.

Lewin, L. (1927). *Phantastica. Die betäubenden und erregenden Genussmittel. Für Ärzte und Nichtärzte.* Berlin: Georg Stilke [online]. *Drugtext*, www.drugtext.org [cit. 2016]. Dostupné z http://www.drugtext.org/Table/Phantastica/

Lewis-Williams, D. (2007). *Mysl v jeskyni.* Přel. A. Faltýsková. Praha: Academia.

Lewis-Williams D., Pearce, D. 2005. *Inside the Neolithic Mind. Consciousness, Cosmos and the Realm of the Gods*. London: Thames and Hudson.

Lim, D. K. (2003). Ketamine Associated Psychedelic Effects and Dependence. *Singapore Medicinal Journal, 44*(1), 31–34.

Lodish, H., Berk, A., Zipursky, L., Matsudaira, P., Baltimore, D., Darnell, J. (2007). *Molecular Cell Biology, 6th edition.* New York: W. H. Freeman.

Luke, D. 2017. Otherworlds. Psychedelics and Exceptional Human Experience. London: Muswell Hill Press.

Marechal, G. (2010). *Autoethnography*. In Mills, A. D., ed. (2010). *Encyclopedia of Case Study Research.* Thousand Oaks, CA: Sage Publications.

Matos, M. (2015). *The Underground is massive: How Electronic Dance Music Conquered America.* New York: Dey Street Books.

Maturana, H. R. (1980). *Autopoiesis and Cognition. The Realization of the Living.* Dordrecht: Reidel.

McConnell, A. R. (2011). The Multiple Self-Aspect Framework: Self-Concept Representation and Its Implications. *Personality and Social Psychology Review, 15*(1), 3–27.

McHale, B. P., ed. (2016). *The Cambridge History of Postmodern Literature.* Cambridge/New York: Cambridge University Press.

Meierhenrich, U. (2008). *Amino Acids and the Assymetry of Life.* Berlin/Heidelberg: Springer-Verlag.

Merkur, D. (2001). *The Psychedelic Sacrament: Manna, Meditation and Mystical Experience.* Rochester/Vermont: Park Street Press.

Merleau-Ponty, M. (1995). *Die Natur. Aufzeichnungen von Vorlesungen am Collége de France 1956–1960.* Transl. R. Grathoff, B. Waldenfels, M. Köller. München: Wilhelm Fink Verlag.

Merleau-Ponty, M. 1968. The Visible and Invisible. Edited by Claude Lefort. Translation A. Lingis. Evaston: Northwestern University Press.

Merleau-Ponty, M. 1958/2005. Phenomenology of Perception. Transl. by Colin Smith. London/New York: Routledge.

Metzner, R., ed. (2004). *Teonanácatl. Sacred Mushrooms of visions. A sourcebook on the psilocybin mushrooms.* Rochester: Park Street Press.

Montuori, A. (2008). *Foreword: Transdisciplinarity.* In Nicolescu, B., ed. (2008). *Transdisciplinarity – Theory and Practice*. Creskill, NJ: Hampton Press, s. ix-xvii.

Moran, D. (2013). *The Phenomenology of Embodiment: Intertwinning and Reflexivity*. In Jensen, R. T., Moran, D., eds. (2013), s. 285–303.

Narby, J., Kounen, J., Ravalec, V. (2010). *The Psychotropic Mind. The World according to Ayahuasca, Iboga, and Shamanism.* Přel. J. E. Graham. Rochester/Toronto: Park Street Press.

Netrunner. (2004). *The Power and the Glory: An experience with harmalin, 5-MEO-DMT & DMT* [online]. Erowid Experience Vautls, www.erowid.org [cit. 2016]. Dostupné z https://www.erowid.org/experiences/exp.php?ID=34866.

Nicolescu, B. (Editor). (2008). *Transdiciplinarity – Theory and Practice.* Cresskill, NJ: Hampton Press.

Nichols, D. E. (2004). Hallucinogens. *Pharmacology & Therapeutics, 101*(2): 131–181.

Nichols, D., Yensen, R., Metzner, R. (1993). *The Great Entactogen – Empatogen Debate*. *MAPS Bulletin, 4*(2), 47–49.

Nitsche, M. (2011). *Prostranství bytí. Studie k Heideggerově topologii*. Praha: Togga.

Nitsche, M. (2013). Metodická priorita fenomenologického pole v transformativní fenomenologii. *Filosofický časopis, 61*(6), 889–901.

Olszewski, D., Burkhart, G. (2002). *Drugs in Focus. Recreational Drug Use – a key EU challenge.* Lisbon: European Monitorin Centre for Drugs and Drug Addiction.

Ortony, A., ed. 1993. *Metaphor and Thought.* Cambridge: Cambridge University Press.

Papaspyrou, M. (2014). Femtheogens. The Synergy of Sacred Spheres, In *Psypress 2014 UK, V*.

Passie, T., Halpern, J. H., Stichtenoth, D. O., Emrich, H. M., Hintzen, A. (2008). The Pharmacology of Lysergic Acid Diethylamide: A Review. *CNS Neuroscience and Therepeutics.* 14: 295–314.

Patočka, J. a kolektiv. (2004). *Vojenská toxikologie.* Praha: Grada Publishing.

Paranthropology. Journal of Anthropological Approaches to the Paranormal, *2011*, *2*(4).

Paul, S. M. (2006). Alcohol sensitive GABA receptors and alcoholo antagonists. *Proceedings of the National Academy of Sciences of the USA*, *103* (22), 8307–8308.

Pawluch, D., Shaffir, W., Miall, C., eds. (2005). *Doing Ethnography. Studying everyday life.* Toronto: Canadian Scholars' Press.

Pendell, D. (1995). *Pharmako-Poeia. Plant Powers, Poisons a Herbcraft.* San Francisco: Mercury House.

Perry, E. K., ed. (2002). *Neurochemistry of Consciousness: Neurotransmitters in Mind.* Amsterdam: John Benjamins Publishing Company.

Petříček, M. (2000). *Majestát zákona. Raymond Chandler a pozdní dekonstrukce.* Praha: Herrmann a synové.

Pokorný, V. (2002). *Rozumím, když se nevyznám. Skici k obrazu nestabilního myšlení (diplomová práce).* Praha: FF UK.

Pokorný, V. (2016). *Zdařilost, zvládání, teritorium: úvaha k étosu hranice*. Československá Psychiatrie 60, Suppl. 1, s. 41–52.

Preedy, V. (2016). *Neuropathology of Drug Addictions and Substance Misuse. Volume 3.* London/San Diego/Cambridge/Oxford: Academic Press.

Pumpkin, P. (2005). *Revelations, Cosmic Unity, Entity Contact: An experience with mushrooms – Psilocybae mexicana, alcohol and cannabis* [online]. Erowid Experience Vaults, www.erowid.org. [cit. 2016]. Dostupné z https://www.erowid.org/experiences/exp.php?ID=42367.

Rabinow, P. (1977). *Reflections of Fieldwork in Morocco.* Berkeley/Los Angeles/London: University of California Press.

Rätsch, C. (1993). *50 Jahre LSD-Erfahrung. Eine Jubiläumsshrift.* Solothurn/Löhrbach: Nachtschatten Verlag/Pieper's Medienexperimente.

Rätsch, C. (2005). *The Encyclopedia of Psychoactive Plants. Ethnopharmacology and its Applications.* Transl. J. R. Baker, A. Lee, C. Ballent. Rochester/Vermont: Park Street Press.

Read, T. (2014). Archaidelics. Amplifiers of the Archetypal. *Psypress UK, V.*

Reed-Danahay, D. E. (1997). *Auto/ethnography: Rewriting the self and the social.* Oxford: Berg Publishers.

Reynolds, S. (1998). *Generation Ecstasy: Into the world of Techno and Rave Culture.* Boston: Little Brown & Co.

Richards, W. A. (2016). *Sacred Knowledge. Psychedelics and Religious Experiences.* New York: Columbia University Press.

Robben, A. C., Sluka, J. A., eds. (2007). *Ethnographic Fieldwork. An Anthropological Reader.* Malden/Oxford/Victoria: Blackwell Publishing.

Roberts, T. B. (2013). *The Psychedelic Future of the Mind: How Entheogens Are Enhancing Cognition, Boosting Intelligence and Raising Values.* Rochester/Vermont: Park Street Press.

Roberts, T. B., *Four Stages of Psychedelic Rennaissance: Toward a Wider Vision* [online]. academia.edu.; https://www.academia.edu/19246312/Four_Stages_of_the_Psychedelic_Renaissance_A_Wider_Vision

Roshchina, V. V. (2010). *Evolutionary Considerations of Neurotransmitters in Microbial, Plant, and Animal Cells*. In Lyte, M., Primrose Freestone, P., E. (2010).

Rubio-Ariaz, A., Perez-Hernandez, M., Urrutia, A., Porcu, F., Borcel, E., Gutierrez-Lopez, M. D., O'Shea, E., Colado, M. I. (2014). 3,4-Methylenedioxymethamphetamine (MDMA, ecstasy) disrupts blood-brain barrier integrity through a mechanism involving P2X7 receptors. *The International Journal of Neuropsychopharmacology, 17*(8), 1243–55.

Sacks, O. 2012. Hallucinations. New York/Toronto: Alfred A. Knopf.

Samorini, G. (1995). The Bwiti Religion and Tabernathe Iboga. *Integration, 5*, 105–114.

Sarbin, T. R. (1990). *Metaphors of unwanted conduct: a historical sketch.* In Leary, D. E., ed. (1990), s. 300–330.

Savinelli, A. (1953/2002,). *Plants of Power. Native American Ceremony and the Use of Sacred Plants.* Summertown, TN: Native Voices.

Sessa, B. (2012). *The Psychedelic Renaissance. Reassesing the role of psychedelic drugs in 21st century Psychiatry and Society.* London: Muswell Hill Press.

Shanon, B. (2002). *The Antipodes of the Mind. Charting the Phenomenology of the Ayahuasca experience.* Oxford; New York: Oxford University Press.

Shapiro, M. J. (2012). *Studies in Transdisciplinary Method.* London/New York: Routledge.

Shipley, M. (2015). *Psychedelic mysticism. Transforming Consciousness, Reilgious Experience, and Voluntary Peasants in Postwar America.* Maryland: Lexington Books.

Shulgin, A. T. (1986). The Background and chemistry of MDMA. *Journal of Psychoactive Substances, 18* (4), 291–304.

Shulgin, A. T., Shulgin, A. (1991). *Pihkal. A chemical lovestory.* Berkeley, CA: Transform Press.

Shulgin, A. T., Shulgin, A. (1997). *Tihkal – continuation.* Berkeley, CA: Transform Press.

Schroll, M.A. (2011). Worldviews in Collision, Worldviews in Metamorphosis: Towards a Multistate Paradigm. *Anthropology of Consciousness, 22*(1), 49–60.

Schutz, A. (1976). *Collected Papers II. Studies in Social Theory.* Hague: Martinus Nijhoff.

Siewers, A. K., ed. (2014). *Re-imagining Nature. Environmental Humanities and Ecosemiotics.* Plymouth/Lanham: Bucknell University Press.

Simmel, G. (1903/1971). *The Metropolis and Mental Life.* In Levine, D., ed. (1971), s. 324.

Slater, T. (2014). The LSD Trial. *Psychedelic Press UK, V.*, 74–92.

Snow, O. (2003). *LSD.* Spring Hill, FL: Thoth Press.

South, N., ed. (1999). *Drugs: Cultures, Controls and Everyday Life.* Worldwide: SAGE Publications.

Spencer, K. C., ed. (1988). *Chemical Mediation of Coevolution.* San Diego: Academic Press, Inc.

Stevens, J. (1987). *Storming Heaven. LSD & the American Dream.* New York: Grove Press.

Stewart, J. R., Gapenne, O., Di Paolo, E., eds. (2010). *Enaction: toward a new paradigm for cognitive science.* Cambridge: MIT Press.

StimulatedVindicated. (2008). Meet Mr. Cool: An Experience with Metamphetamine [online]. www.erowid.org; https://www.erowid.org/experiences/exp.php?ID=48576.

Strassman, R. (2001). *The Spirit Molecule. A Doctor's Revolutionary Research into the biology of Near-Death and Mystical Experiences.* Rochester: Park Street Press.

Strassman, R., Wojtowicz, S., Luna, L. E., Frecska, E. 2010. *Inner Paths to Outer Space. Journeys to Alien Worlds through Psychedelics and Other Spiritual Technologies*. Rochester: Park Street Press.

Strong, L. *Psychopomps. Making Road for the Spirit to Cross Over* [online]. Psychopomp Stories: Contemplating Death in a Spiritually Diverse Society, doctoral dissertation, http://www.psychopomps.org/psychopomp-stories/abstract.html.

Suryani, L. K. (1994). *Trance amd Possession in Bali: A Window on Western Multiple Personality, Possession Disorder and Suicide.* Oxford: Oxford University Press.

Szakolczai, A. (2009). Liminality and Experience: Structuring transitory situations and tranformative events. *International Political Anthropology, 2* (1), 141–172.

Sztompka, P. (2008). The focus on everyday life: A new turn in sociology. *European Review, 16*(1), 1–15.

Toro, G., Benjamin, T. 2007. Drugs of Dreaming. Rochester: Park Street Press.

Torre, J. C. (1972). *Dynamics of Brain Monoamines.* New York/London: Plenum Press.

Torres, C. M., Repke, D. B. (2006). *Anadenanthera, Visionary Plant of Ancient South America.* New York/London/Oxford: Haworth Herbal Press.

Tracey, D. J. (1995). *Neurotransmitters in the Human Brain.* New York: Springer Science.

Turner W. V., Bruner, E., eds. (1986). *The Anthropology of experience.* Urbana/Chicago: University of Illionis Press.

Turner, D. M. (1994). *The Essential Psychedelic Guide.* San Francisco: Panther Press.

Turner, W. V. (1985). *On the Edge of the Bush. Anthropology as Experience.* Tuscon: The University of Arizona Press.

Jakob von Uexküll. A Foray into the worlds of Animals and Humans. With a Theory of Meaning. Transl. by Joseph D. O'Neil. Minneapolis/London: University of Minnesota Press.

Underwood, R. A. (1969). Ecological and psychedelic approaches to theology. *Soundings. An Interdisciplinary Journal, 52* (4), 365–393.

Walsh, R., Grob, C. S., eds. (2005). *Higher Wisdom. Eminent Elders Explore the Continuing Impact of Psychedelics.* Albany: State University of New York Press.

Webster, R. A., ed. (2001). *Neurotransmitters, Drugs and Brain Funtion.* Chichester: JOHN WILEY & SON.

Winkelman, M. (2000). *Shamanism: The Neural Ecology of Consiousness and Healing.* Westport: CT: Bergin & Garvey.

Winkelman, M. (2010). *Shamanism. A Biospsychosocial Paradigm of Consciousness and Healing.* Santa Barbara/Denver/Oxford: Prager.

Wittemann, A. 2013. *Warum wir erst anfangen uns selbst ze verstehen: Die architecture der Innenwelt*. Bielefeld: Kamphausen.

Wittgenstein, L. 1958/1999. Philosophical Investigations. Second Edition. Translated by G. E. M. Anscombe. Oxford: Blackwell Publishers.

Witzany, G. (2006). *The Logos of the Bios 1. Contributions to the Foundation of a three-leveled Biosemiotics.* Helsinki, Umweb Publication: Helsinki, Umweb Publication.

Wolfe, T. (1969/1999). *The Electric Kool-Aid Acid Test, New York: Bantam Books.* New York: Bantam Books.

World Health Organization. (2004). *Neuroscience of psychoactive substance use and dependence.* Geneva: WHO.

Yensen, R., Dryer, D. (1992). *Thirty years of psychedelic research: The Spring Grove experiment and its sequels*. International Congress of the European College of Consciousness – World of Consciousness, Göttingen. Baltimore: Orenda Institute.

Zajíček, P. (1990). *DG 307. Texty z let 1973–1980.* Praha: Vokno.

Znamenski, A., ed. (2004). *Shamanism: Critical Concepts, 3 vols.* London: Routledge.

Online resources:

1971 Convention on Psychotropic Substances [online]. *UNODC*. United Nations Office on Drugs and Crime; http://www.unodc.org/unodc/en/Resolutions/resolution_1975-12-09_1.html.

2-CB chemistry [online] erowid.org. https://www.erowid.org/chemicals/2cb/2cb_chemistry.shtml.

Erowid. Documenting the complex relation between Humans & Psychoactives: www.erowid.org, [online]. [cit. 2016]. https://www.erowid.org/.

Shroomery. Magic Mushrooms Demystified; https://www.shroomery.org/.

NYX.CZ, [online]. http://www.nyx.cz/.

Enpsyro [online]. Encyklopedie psychoaktivních rostlin, www.biotox.cz; http://www.biotox.cz/enpsyro/

BLOTTEART.COM [online]. The World's largest selection; http://blotterart.com/.

Psychonaut.wiki [online]. psychonautwiki.org; https://psychonautwiki.org/wiki/Main_Page.

Brain Reward Pathways [online]. Molecular Biology of Drug Addiction: neuroscience.mssm.edu [cit. 2016]. Dostupné z http://neuroscience.mssm.edu/nestler/nidappg/brainrewardpathways.html.

Controlled Drugs and Substances Act [online]. Drugs and Substances under International Control [cit. 2016]. Dostupné z http://isomerdesign.com/Cdsa/scheduleUN.php?schedule=2 & structure=C.

Davies, A. (2006). The Summer of Rave [online]. https://www.youtube.com/watch?v=A-XrlMpwEuM.

Different Life [online]. [cit. 2016]. Dostupné z http://www.differentlife.cz/.

European Drug Report 2015. Trends and Developments [online]. European Monitoring Centre for Drugs and Drug Addiction; http://www.emcdda.europa.eu/publications/edr/trends-developments/2015.

Frecska, E. (2015). *The Possible Role of DMT in Oxidative Stress & at the End of Life* [online] Presentations at the Breaking Convention 2015, *www.vimeo.ecologycosmos*; https://vimeo.com/143114009

Gnosis, Nipo (1996). Psychedelic experience FAQ [online]. *The Vaults of Erowid: www.erowid.org*. [cit. 2016]. Dostupné z https://www.erowid.org/psychoactives/faqs/psychedelic_experience_faq.shtml.

Heretik System – We had a Dream [online]. *YouTube.com*; https://www.youtube.com/watch?v=_Kbpr5ZPXD8.

Cherry, K. (2015). What is a Neurotransmitter [online]. *www.verywell.com*; http://psychology.about.com/od/nindex/g/neurotransmitter.htm.

Jiné časopisy v Česku po 1989 [online]. www.Bigmag.cz; http://www.bigmag.cz/.

Maďa, P., Fontana, J. a další (nedatováno). *Funkce buněk a lidského těla. Multimediální skripta*. (3. LF UK) [online]. http://fblt.cz/.

New Psychoactive substances [online]. www.drugwarfacts.org; http://www.drugwarfacts.org/cms/chapter/NPS#sthash.rL4NWCVl.zT3qFkI4.dpbs.

Online ethymological dictionary [online].http://www.etymonline.com/.

Sachahambi (2008).What indigenous groups traditionally use Ayahauasca? [online]. Ayahauasca.com, http://www.ayahuasca.com/spirit/primordial-and--traditional-culture/what-indigenous-groups-traditionally-use-ayahuasca/.

Single Convention on Narcotic Drugs [online]. *Wikipedie. The Free Encyclopedia*; https://en.wikipedia.org/wiki/Single_Convention_on_Narcotic_Drugs.

Smh8 (2006). *Freetekno & CzechTek 2005* [online]. freetekno.cz; http://freetekno.cz/Public23/freetekno-shm8.pdf.

Waywardtales – Book: A Darker Electricity [online]. waywardtales.wordpress.com; https://waywardtales.wordpress.com/book/.

Movies:

Hockenhull, O. (2013). *Neurons to Nirvana.* Mangusta Productions.

Křemen, P. (2015). *LSD made in ČSSR.* Česká Televize.

Russel, K. (1980). *Altered states*. Warner Bros.

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