# Spirituality, the connection to nature, and the role of shamanic rituals

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# **Abstract**

Humanity and Nature are facing an unprecedented crisis, which according to several studies can be linked to the disconnection from nature of the modern Western society. Authors from different fields dedicated considerable efforts in searching paths for reconnecting with nature. Spiritual practices and experiences showed potential in enhancing connection with the natural environment. However, a considerable gap exists in understanding the effects of shamanic practices, drivers of spiritual experience, on people's connection to nature. In this research, I analysed the influence of an Initiation to Ayahuasca, one of the most important and fundamental rituals of the Amazonian shamanic traditions, on participants' connection to nature. For this purpose, a group of 17 shamanic practitioners have been selected and interviewed to understand their perceived changes in their connection to nature due to the participation in the Initiation to Ayahuasca. The analysis of the interviews revealed changes in connection to nature following the ritual. Participants, through the Initiation, lived several experiences, such as the perception of an alternative reality, the "Other Reality", where "special" encounters changed their vision of nature. Participants received teachings, knowledge and power from the spiritual world, which changed their awareness and had practical implications for their daily life. In the "Other Reality", the identity of participants passed through a process of transformation. Moreover, the encounters and relationships established with various inhabitants of nature created durable emotional bonds and greatly increased the respected and consideration for nature. This resulted in a rise of empathy for all the forms of life and more responsible and committed behaviour towards nature. The Initiation to Ayahuasca, conducted in the frame of a traditional ritual, is a journey of ontological transformation, which can reconnect Western people with nature. Therefore, these findings support the vision that conservation approaches based on cultural and spiritual practices should indeed be considered by Western conservationists since they can help to counter the current environmental crisis.

#### 1. Introduction and problem statement 1

#### 2. Theoretical and conceptual framework 4

#### 2.1. Ontological considerations 4

#### 2.2. Connection to Nature 5

- 2.2.1. Vision of Nature: cognitive aspect of connection to nature 6
- 2.2.2. Identity and emotions: affective aspect of connection to nature 7
- 2.2.3. Behaviour: conative aspect of connection to nature 8

#### 2.3. Overview of the connection to nature model 8

#### 3. Methods 10

#### 3.1. The case 10

- 3.1.1. Shamanic rituals 11
- 3.1.2. The use of Ayahuasca 11

#### 3.2. Research participants 12

- 3.3. Qualitative design 14
- 3.4. Data Analysis 14

#### 4. Results 16

#### 4.1 Experiences during the Initiation to Ayahuasca 18

- 4.1.1. Perception of the so called "Other Reality" 18
- 4.1.2. Experience of the Sacred 19
- 4.1.3. Feeling as part of a whole 19
- 4.1.4. Change of identity 20
- 4.1.5. Shapeshifting 20
- 4.1.6. Perception of a grid that runs through the universe, called also "web" or "network" 21
- 4.1.7. Purification through vomit and diarrhoea 22
- 4.1.8. Condition of wellbeing and post-wellbeing 23
- 4.1.9. Dismemberment 24
- 4.1.10. Traumatic experiences 24
- 4.1.11. Summary of the experiences during the Initiation to Ayahuasca 26

#### 4.2. Change in visions of nature 26

- 4.2.1. Definition of nature before and after the Initiation to Ayahuasca 26
- 4.2.2. Change of awareness 30
- 4.2.3. Nature as conscious 31
- 4.2.4 Summary of the changes in visions of nature of participants 36

#### 4.3. Identity and emotions in relation to nature 36

- 4.3.1. People's vision of the self in relation to nature 36
- 4.3.2. Nature to be protected/Spirits driving environmental destruction 40
- 4.3.3. Role of nature in the development of self-identity 40
- 4.3.4. Empathy and emotions of people toward the various forms of nature 41
- 4.3.5. Summary of the influences on people's identity and emotions related to nature 42

#### 4.4. Influence on Behaviour 42

- 4.4.1. Nature conservation related behaviour 42
- 4.4.2. Use of nature 43
- 4.4.3. Politics of nature: nature as a driver in political choices 44

- 4.4.4. General behaviour 44
- 4.4.5. Summary of the influence on behaviour 46

#### 4.5. Synthesis of the major findings 46

#### 5. Discussion 47

#### 5.1. Discussion on results 47

- 5.1.1. Experiences during the Initiation to Ayahuasca 47
- 5.1.2. Nature experiences and connection to nature in literature 49
- 5.1.3. Visions, the origin and different explanations 50
- 5.1.4. Change of people's Visions of Nature 52
- 5.1.5. Influence of the Initiation on people's identity and emotions in relation to nature 53
- 5.1.6. Influence of the Initiation on people's behaviour 55
- 5.1.7. Merging ontologies 55
- 5.1.8. Teachings from Spirits and environmental education 56

#### 5.2. Discussion on theory 56

- 5.3. Discussion on methods 57
- 6. Conclusions and recommendations 59
- 7. References 61
- 8. Annexes 64

# 1. Introduction and problem statement

Disconnection from the natural world is increasing (Louv 2008) and it is identified by several authors as a contribution to the contemporary environmental crisis (Howard 1997, Schultz, Shriver, Tabanico, & Khazian 2004, Nisbet et al. 2009). Furthermore, the necessity to reconnect society with nature is a shared concern inside the scientific community (Zylstra et al. 2014). The importance of human-nature relationship is often considered: connection with nature is linked to environmental responsible behaviour (Franz and Mayer 2014, Lumber et al. 2017) and several factors supporting human quality of life, such as physical health, psychological well-being, cognitive ability and social cohesion (Bragg 1996, Conn 1998, Roszak 1992, Shultz 2000, Thomashow 1998, Keniger et al. 2013). In addition, there is an increase of meaning and inspiration in the life of people when they are more connected with nature (Keniger et al. 2013).

Considering the promising effects of bonding with nature mentioned above, there is a need to clarify how to increase this connection, the outcomes that will be derived from it and its potential for nature conservation and human well-being (Zylstra et al. 2014). In particular, a spiritual relationship with the natural environment has untapped potential to motivate people toward a spontaneous nature conservation habit. However, due to the difficulty to define spiritual values, they are not often taken into consideration in policy-making processes (Verschuuren 2010, Satz et al. 2013).

Spirituality is a slippery concept to define with scientific argumentation, however, in this research I consider spirituality as awareness of something greater, as a connection with all the other beings, a profound sense of meaning (Schroeder 1992).

In the research of Schroeder (1992), spiritual experiences resulted in a relation to the natural environment; a place in nature is often determinant in the connection with the spiritual world. In the same article the author recognised a deeper level of experiencing than just intellectual, describing it as an emotional and meaningful level. Spirituality includes emotions, beliefs, meanings, and contains therefore a great power to motivate people to develop a higher responsible behaviour for all the forms of life (Schroeder 1992, Carrol 2001). The emotional ties with nature and its intangible aspect can be powerful incentives for conservation habits (Shanley et al. 1996). Besides, the spiritual relationship with nature is mediated by direct experiences: different spiritual traditions give the highest importance to the direct personal experiences (De Giorgio, 2017a) and nature furnishes the suitable place for experiencing the spiritual (William and Harvey 2001).

Mircea Eliade (1964) conducted an extensive research on different forms of spirituality around the world and concluded that shamanism underlays all the other spiritual traditions on the planet. He explained that shamanism is a term used to describe various practices diffused in the world, that can be collocated in ancestral times, at the beginnings of our civility, and their commonality is the direct encounter with spirits through the journey to other worlds in an altered state of consciousness. In the words of a shaman: "Shamanism is not a system of beliefs, or a philosophy, or a theory about the world. It isn't a religion either, as usually intended. Shamanism is just the natural, immediate way of seeing the world, the attitude we had when children, before Western education repressed it. Shamanism is what stands before any religious or scientific creed" (De Giorgio 2017b). Therefore, shamanism comes before any institution and belief: it is mediated by experience. The he continues: "Shamans do not "believe" in the world of spirits, nor do they believe in materialistic statements, shamans just experience the world of spirits from whom they receive knowledge, power and healing. They don't doubt that spirits exist as we don't doubt the existence of the baker supplying the bread we eat. Shamanism is experience." (De Giorgio 2017). Harner (2017) wrote that Shamans are often called "see-ers" or "people who know" in their tribal languages, because they acquire their knowledge through first-hand experiences to heal, help the community and do other things. If shamans do not get results, people in their tribe will not require their services anymore (Harner 2017). Other authors examined shamanism, describing it in different ways. For Nevill Drury shamanism is the reflection in the material reality of the principles of animism (cited in Von Stuckrad 2002) and animism is a vision of the world where everything contains a spirit, a life essence, and everything is connected (Horwits, cited in Von Stuckrad 2002). Therefore, shamanism seems to lead to a greater connection with the world that can result in a deep respect for all the forms of life. The shamanic rituals are the core part of shamanism, in which the participant can experience a journey in different realities with vision and experiences of different nature. The rituals can be explained as traditional practices that connect people to invisible dimensions (Von Stuckrad 2002), increasing awareness of people and their connection with the natural elements.

This research is collocated between two great intertwined themes of contemporary life in Western societies: the environmental crisis together with disconnection from nature and the cultural change that is happening in the West (Campbell 2015). The Western society seems to be in a cultural change, where multiple movements try to find inspiration and direction from the cultures around the world (Campbell 2015, Hedlund-de Witt 2012). The lack of meaning in people, the "emptiness" observed in our contemporary society and the will to create a more sustainable future are some of the propulsive forces behind this change (Hedlund-de Witt 2012). The exploration of different world views led to the raise of movements such as the New Age phenomenon (Hedlund-de Witt 2012) and the interest of Westerners in various forms of indigenous spirituality scattered around the world.

To sum up, this research engages with several discourses on the environmental crisis that the people all over the world are facing and the cultural change that is happening in the Western countries. The old indigenous worldviews and their spirituality seems to have a potential in driving people toward a closer relationship with nature with all the potential benefits mentioned before.

#### To sum up the above:

- disconnection from nature is rising around the world and there is increasing evidence that it is linked with the actual global environmental crisis;
- connection with nature is linked to environmentally responsible behaviour and several factors supporting quality of human life;
- hence, there is the need to enhance the connection of people with nature;
- there is evidence that spirituality can raise the connection to nature of people;
- spirituality is built through experiences;
- shamanic rituals are powerful drivers of spiritual experiences;
- especially Western people now seek spiritual development in indigenous shamanic ritual.

Therefore, this research wants to explore the impact of shamanic rituals on Western people's connection to nature. The ritual I investigate is a shamanic Initiation; the reason for this choice is in the fact that an Initiation is a ritual that potentially could generate a greater and clearer distinction between connection to nature before the Initiation and after than that related to other subsequent rituals.

Furthermore, since that connection to nature is linked with an environmentally responsible behaviour (Nisbet et al. 2009), I want to verify if a ritual-induced increase in connection to nature will also result in a positive change on environmentally responsible behaviour.

To do so, I addressed the following research question and sub-questions:

What are the perceived changes in the way Western people connect to nature due to the participation in a shamanic Initiation?

- a. What are the perceived changes in Western people's visions of nature due to the participation in a shamanic Initiation?
- b. What are the perceived changes in Western people's identity in relation to nature due to the participation in a shamanic Initiation?
- c. What are the perceived changes in the emotions of Western people toward nature due to the participation in a shamanic Initiation?
- d. What are the changes in Western people's reported nature-related behaviour due to the participation in a shamanic Initiation?

# 2. Theoretical and conceptual framework

In this chapter I explore existent studies and theories relevant to the above defined RQ, such as the concept of shamanism, its ontologies and its worldview, in particular the link between the shamanic traditions and the animistic worldview, the views on nature and the emphasis of shamanism in direct experience instead of beliefs. Furthermore, I elaborate a conceptual framework to define the concept of connection to nature, in order to subsequently study the effects of the shamanic Initiation on Western people's connection to nature.

# 2.1. Ontological considerations

Shamanism is often related to indigenous spiritual traditions based in ontologies which are different from modern Western ones. These ontologies shape the knowledge, the world view, the spirituality and the behaviour of Indigenous People (Verschuuren 2017) and taking them into consideration implies the exploration of the existence of multiple realities that do not have to merge coherently in one world, but coexist at the same time (Law 2011). This is opposed to the vision where only one reality exists while the different ontologies are simply different interpretations of the same reality (Latour 2011). Moreover, it is also in contraposition to the dualism between nature and culture described by Descola (2006) and Latour (2012) as modern ontology (cited in Verschuuren 2017:31).

While it is difficult to generalise about indigenous spirituality, due to the enormous amount of different spiritual traditions that fall under this name, many of them have animistic and shamanic principles in common. The animistic worldview sees a spirit in everything, where everything has a consciousness and is connected with the whole (Horwits, cited in Von Stuckrad 2002). For Nevill Drury (cited in Von Stuckrad 2002), shamanism is the reflection in the material reality of the principles of animism. A different vision on the commonalities and differences between animism and shamanism can be found in the statement of a shaman: "Shamans are always animists, but animistic traditions are not always shamanic, due to the difference in the practices of journeying the other world"; shamanic practices that Eliade called "the techniques of ecstasy" (De Giorgio 2017).

Shamanism is associated with many different traditions and phenomena around the world. In this research I understand shamanism as a tradition based on journeying into other realities and encountering Spirits that can share knowledge, power and healing with people. Eliade (1964) tried to simplify the definition of shaman describing its activity: "The shaman specialises in a trance during which his soul is believed to leave his body and ascend to the sky or descend to the underworld."

The ontological recognition that there is a spiritual world linked to our world has practical implications. It means that shamans can practice by experience how to connect deeply with the spiritual world of nature and obtain knowledge and power that can change and modify the behaviour in our material world and they can guide other people in to do so.

Characteristics of shamanism that are fundamental for this research are the ways it looks at nature and the fact that it is based on experience. The emotional and intimate connection with the animals, spirits and all the beings that inhabit nature create deep bonds, that are translated in a respectful behaviour toward all the human and non-human forms of life and even the non-biological life. In fact, in the shamanic tradition everything is alive, everything is conscious and with feelings. Therefore, they respect also the rocks, the waters and the natural phenomena as living and conscious beings. While for many Western conservationists "biodiversity" is a list of species, indigenous people say "all our relations", an "extended family" as called by Posey (1999) that shows the kinship with all the forms of life. These relations are often considered in the politics and conservation acts of Indigenous sacred natural sites (Verschuuren 2017) and the extended family contributes fundamentally in the development of the cultures and knowledge of these peoples. Some examples are presented in the volume edited by Posey et al. for UNEP (1999). As reported by Snow (as quoted by Posey 1999:5) "many indigenous

peoples believe they once spoke the language of animals and that their shamans still have this ability". Furthermore, James Galarrwuy Yunupingu, Chairperson of the Northern Land Council, stated: 'My land is mine only because I came in spirit from that land, and so did my ancestors of the same land. My land is my foundation' (as quoted by Posey:5). Whitt (1999) explained how the Cherokee identify knowledge itself as an integral part of the earth, without whom it could not exist. Also, the Mazatecs of southern Mexico have shamans and healers that confer with the plant spirits in order to heal. During their apprenticeship the curers learn to listen to the plants talk (Harrison, 1999). Don Hilde, a Pucallpa healer, explains: 'I did not have a teacher to help me learn about plants, but visions have taught me many things. They even instruct me as to which pharmaceutical medicines to use' (Dobkin de Rios 1972:146).

The examples above provide a background on the relationship that people in the shamanic traditions have with everything else. The relationships with living beings and natural phenomena are part of their daily life, have emotional, intimate components that create the bonds of their extended family. The shamanic rituals are practices that facilitate these connections and the purpose of this research is to understand how they affect the connection to nature of people and their environmentally responsible behaviour. In fact, measures of connection to nature have been proven to be correlated to environmentally responsible behaviour (Nisbet et al. 2009, Geng et al. 2015), in this research understood as actions done by individuals or groups with the purpose to remediate environmental issues (Sivek & Hungerford 1989).

It is worth mentioning a debate around the concept of connection to nature (Fletcher 2017). In fact, the very word "connection" already implies "disconnection". And more, speaking about nature and the natural environment as something 'out there' indicates a separation between man and nature. The centre of this research is to investigate different degrees of the connection to nature of people, therefore it already implies the presence of separation between Western people and what we call "nature". As reported in the examples before, indigenous ontologies perceive the relationship between humans and the "other than human" world differently. I am aware of the danger that words and language may not be fully adequate to describe spiritual issues and people's perceptions of nature, but I decided to stick with the commonly used terms for a matter of clarity.

This thesis engages with the evaluation of the experiences that Western people encounter during the shamanic practice and it wants to assess how these experiences change, as supposed, people's connection to nature. In order to fulfil this aim, I have constructed a conceptual framework for measuring people's connection to nature, which is described in the following sections.

# 2.2. Connection to Nature

Connection to the natural environment and other living beings, according to Wilson (1984), lies in an innate need for the affiliation with nature and the other living beings that humans possess. The biophilia hypothesis (Kellert & Wilson 1993) was developed to explain the human inclination to connect to the natural environment. The hypothesis stresses the fact that our evolutionary history largely happened in nature and only recently humans left it for the cities. Therefore, the authors point out, the inclination to connect to nature is embedded in our biology. In this research connection to nature is understood as the human need and inclination to connect with nature and other living beings.

Several concepts have been proposed to evaluate people's connection to nature. Some of the most used ones are the New Environmental Paradigm, the Connectedness to Nature scale, the Nature Relatedness scale and the Visions of Nature (Van den Born et al. 2001, Nisbet et al. 2009, De Groot 2010). In comparison to the other ones, the Nature Relatedness scale covers more aspects of the relation with nature of people (Nisbet et al. 2009, Braito et al. 2017) and it is proved to be more correlated and more accurate in the prediction of environmentally responsible behaviour (Lumber et al. 2015). The scale describes individuals' levels of

connectedness with the natural world, through the investigation of the cognitive, affective and physical connection people have with nature.

In order to cover all the aspects of connection to nature addressed by the research question, I worked with different theories, and made a few changes on them.

First of all, I built a conceptual framework for connection to nature, starting from a tripartite model that defines three aspects of connection to nature: cognitive, affective and conative. This model, originally introduced by the German Faculty of Psychology of the eighteenth century with the purpose to frame human thinking, has been highlighted in the twentieth century by the work of William McDougall (Hilgard 1980). These three aspects have been used in several studies on sense of place, in order to measure people's attachment to a place and the behavioural consequences of it (Yuksel 2010). Moreover, theories of sense of place have been associated with the measure of connection to nature (Gosling and William 2010).

Secondly, I used the Visions of Nature concept (Van den Born et al. 2001) to elaborate the cognitive aspect and the Nature Relatedness scale (Nisbet et al. 2009) and the theories on sense of place for the affective aspect. For the conative aspect of nature conservation, to frame the participants' behaviour I used the activity domains of Elands and Van Koppen (2012).

I found the model consistent with the purpose of this research of measuring people's connection to nature. In the following, I will elaborate the theory on the three aspects of connection to nature and I will define their indicators.

## 2.2.1. Vision of Nature: cognitive aspect of connection to nature

The cognitive aspect of connection to nature includes cognitions, thoughts, beliefs and worldviews about nature and human-nature relationship. Each individual has a vision on what is nature, what are the values connected to it and what is the appropriate relationship with it and on what is one's own place in it (De Groot 2010). According to Norton, "[A] world view is not necessarily a well-developed systematic philosophy. It can be, but the world view of most people remains a simple sets of background assumptions, often not even recognised by these people." (as quoted in Van den Born 2007)

The cognitive aspect of connection to nature is in this research built around the concept of Visions of Nature (Van den Born et al. 2001). This concept is constituted by three elements that will be used as indicators:

- Values of Nature are the motives why people perceive nature as important;
- *Images of Nature* are the types of nature that people identify answering the question: "What is nature?".
- Images of Human and Nature Relationship are the kind of relation between "Humans and Nature" that people perceive to be appropriate. The concept of Human and Nature Relationship has been used by Buijs (2009) to create a scale based on four categories of Human and Nature Relationship: Mastery over nature, Stewardship of nature, Partnership with nature and Participation in nature. Some authors (Van den Born 2007:37, De Groot 2010) gave attention to another Image of Human and Nature Relationship, the Unio Mystica, also identified as Oneness with Nature. In this relationship with nature, the personal identity is fused with nature, while in Participation in nature there is a profound connection, but the identity conserves its integrity (Zweers 2000).

My understanding of Visions of Nature does not end in this definition but wants to leave the freedom to participants to fully describe what is their vision of nature. Therefore, participants' answers may cover a wider range of elements than those covered in the Visions of Nature of Van den Born et al. (2001). My attempt to reduce the conceptual separation between humans and nature created by words, mentioned in the previous

section, is to let the participants define by themselves what they understand as nature and then refer to their "nature" in the conduction of the interviews.

# 2.2.2. Identity and emotions: affective aspect of connection to nature

The affective aspect of connection to nature is here understood as the emotions that people have towards nature. Moreover, this aspect covers the self-identification with nature, understood by Nisbet et al. (2009) as an important component of connection, and the sense of the self that derives from experiencing nature.

The use of certain theories on the sense of place (Williams & Vaske 2003, Stedman 2002, Gosling and Williams 2010) was helpful in the conceptualisation of the affective component of connection to nature. Nevertheless, it is likely that the personal construct that each participant has for nature, refers to some real places in nature as well.

Place attachment is defined as a positive connection or emotional bond between people and specific places (Williams & Vaske 2003). It usually comprises the three components emotions, cognition, behaviour, but the emotional aspect is the most considered one (Low & Altman 1992, Jorgensen & Stedman 2001, Kyle et al. 2004 as cited in Stedman 2002). In this research the emotional ties between people and nature are of extreme importance, as they are easily observable indicators through which connection to nature is manifested. Some studies observed a correlation between place attachment, connection to nature and environmental behaviour (Gosling and Williams 2010). If intimacy with a place - in this case nature - increases, so do empathy and disposition to help nature and other beings (Mayer & Frantz 2004). This connection can be used to predict responsible environmental behavior (Gosling and Williams 2010). Therefore, studying emotional bonds between people and nature can be seen as a tool to understand if the changes in terms of connection to nature that result from the shamanic ritual will be translated into a higher environmental concern of participants.

Moreover, to understand the identity component of connection to nature I used the framework of Nisbet et al. (2009), in combination with the theories of place identity. Nesbit's concept of Nature Relatedness (NR), there are three factors: NR-Self, NR-Perspective and NR-Experience. The factor NR-Self represents the personal identification with nature and the feelings and thought about one's personal connection (Nisbet et al. 2009), which I used in defining the indicators necessary to evaluate the affective aspect of connection to nature.

Theorists are not in accord yet whether place identity and place attachment are synonymous or whether they represent different aspects of the relationship of people with a place. Place identity could be identified as an answer to the question "Who am I?", that frequently comprehend the question "Where am I?" (Dixon and Durrheim 2000). Therefore, a place can confer a sense of belonging that plays a considerable role in the process of discovering the self-definition.

Identity is a sense of self, not intended only in an individualistic interpretation, but as the identity of the individual in relation with something else, for instance people, animals, natural elements, landscape, etc. Furthermore, place identity is a form of identification, resulting from the experiential process in and with the environment. The attachment to a place can enlarge this identity (Schultz et al. 2004) and it can lead to greater environmental concerns (Schultz 2000).

In order to identify the indicators for the affective component of connection to nature, I looked to the Nature Relatedness-Self factor of Nisbet et al. (2009). I took the elements that those questions are investigating and used them as indicators. Additionally, I added the last two indicators, which are elements typically researched in the theories of sense of place mentioned above.

The indicators of the affective aspect of connection to nature are:

- Emotions of people toward the various forms of nature
- Emotional bonds with nature

- Empathy towards the different forms of nature (seen as the capacity to understand and share the feelings that the different forms of nature have)
- People's vision of the self in relation to nature (the answer to the question "Who am I in relation to nature?")
- Role of nature in the development of self-identity
- Role of people towards nature

# 2.2.3. Behaviour: conative aspect of connection to nature

The conative aspect of connection to nature represents the behavioural consequences of connection to nature. In this research I used the activity domains defined by Elands and van Koppen (2012) to frame participants' behaviour toward nature. The three domains are the following (indicators in brackets):

- Nature conservation: includes activities for the protection of nature in a broad sense (donation for nature conservation, involvement in nature conservation activities)
- Use of nature: includes modalities through which people use nature (recreational time in nature)
- Politics of nature (political choices involving nature)

Moreover, I added another activity domain that covers other more general behaviour toward nature that were not included in the previous three domains.

 General behaviour towards nature (altruistic behaviour towards nature, commitment in reducing ecological footprint)

# 2.3. Overview of the connection to nature model

In the model of connection to nature used for this research, I consider nature as universally present. Here nature is not conceptualised from one specific viewpoint, but as perceived and experienced by participants during the shamanic Initiation. The experiences that participants encounter in the shamanic Initiation are the dynamics that supposedly change people's connection to nature.

The three aspects of connection to nature are deeply interconnected, they influence each other, and they overlap to some extent. Thus, dividing connection to nature in these three components is an artefact but is necessary to study in its components the connection to nature of participants



# EXPERIENCES→ CHANGE

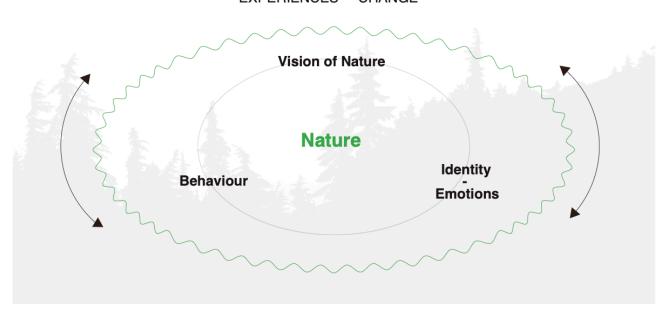


FIGURE 1: Operationalisation of connection to nature with its three aspects: cognitive (Visions of Nature), affective (Identity and Emotions) and conative (Behaviour).

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# 3. Methods

In Academia, the study of people's connection to nature has been conducted through several methods, both qualitative and quantitative (Shultz 2000, Van den Born et al. 2001, Nisbet et al. 2009, De Groot 2010, Zylstra et al. 2014). In the case of this research the qualitative method was the more appropriate because I needed to capture people's personal views and experiences to evaluate if the dynamics of the rituals would result in an influence on connection to nature. The qualitative method allowed me to obtain a more realistic view of participant's lived experiences that could not be measured and understood in numerical data and statistical analysis (Anderson 2010). Furthermore, the immersion in the participants' worlds would expectedly produce results that could be helpful in pioneering new ways of understanding of the shamanic phenomena and the potential effects on people's connection to nature.

Therefore, I chose for semi-structured interviews as the major research method. My target group were Western people that had participated sometime in their lives in a shamanic ritual. For this investigation, the ritual I chose was the Initiation to Ayahuasca, because of its centrality in several Amazonian shamanic traditions. Other reasons for the choice of this specific ritual will be explained in the next section.

In addition, I conducted quantitative research among the same group, using the questionnaires connected to the Human-Nature scale and the Nature-Relatedness scale.

Overall, this research engages with a phenomenological vision: there is the necessity of direct experience to understand the essence of the phenomena. Shamans, too, strongly agree with the identification of direct experience as the only source of real knowledge, understanding and consciousness (De Giorgio 2017). Experience is never ending and always unique, therefore research including people tends to always have an exploratory character. In the case of this research the direct experience takes two courses. The first is my long path in shamanism; the second is the direct experience of the participants that I tried to report in the clearest way possible, leaving a lot of space to participants' own explanations, which I carefully interpreted holding back my own interference as best as I could.

## 3.1. The case

Eight years ago, through a bizarre set of coincidences, such as night dreams with shamanic elements and, finally, a friend of mine informing me of the presence of a shaman not too distant from where I was living, I met the shaman Francesco Tsunki De Giorgio. With him I approached the world of the Shuar shamanism and he taught me the shamanic way. My Initiation to Ayahuasca took place in a European forest in 2013 and since then I have been learning the wisdom of the Shuar tradition. We travelled in wild remote places of the world, in wild rainforests, the environment where this tradition has been developed for more than thousand years.

During these years I met several people in the rituals organised by Tsunki and we developed a certain communitarian bond. In my first proposal, I wanted to research the changes on people's connection to nature with a before-after design with participation in an Initiation and direct participation. Unfortunately, within the given timeframe, to participate to such an event has been proven impossible. Therefore, I had to change the design to an indirect 'before-after' one based on memory. So, I thought to study the effects that the Initiation had on the connection to nature of the members of Tsunki's association "Il Tamburo dello Sciamano". The association has as its mission to preserve and divulgate the Amazonian traditional knowledge of the Shuar. These people did not take part all together in a single Initiation, but they did it in different periods and different places. Nevertheless, the settings of the ritual have always been the same and the Initiation is always a personal path, different for each person.

In addition, there is another very simple reason why I chose this group of people and not another. This research investigates the intimacy of people's life and their "most elusive topics of the perception, cognition and expression of reality" (Cohen 1984:227). The trust that we have for each other with the shaman and the

members of the association would allow me to be welcomed without suspicion and it would give the participants the comfort to be open and to freely describe in depth what happened during their Initiation. It is said that "when a good anthropologist has a good understanding of the culture he is studying, he will pass as a member of that culture" (Fotiou 2010:62).

Here, I was not properly studying another culture, but people involved in the encounter of two cultures and two ontologies: the modern Western and the Shuar ones. Moreover, some authors may say that "we can never know other people's experiences but by sharing a ritual space with them and going through what they were" (Fotiou 2010:62). This can obviously facilitate the empathic process.

The researcher needs to walk on a tight rope to avoid losing the balance between empathising with the subject and retaining some sort of objectivity.

#### 3.1.1. Shamanic rituals

The shaman Francesco Tsunki De Giorgio was trained among the Shuar people, who perpetuated their traditional life in the Amazon in Ecuador for more than two thousand years. He founded the association "Il Tamburo dello Sciamano", whose work brought the Shuar's shamanic tradition in Europe. Other Westerners encountered the Shuar tradition, for example Micheal Harner, anthropologist from the United States, who established the Foundation for Shamanic Studies (FFS 2016) to share in his country the potentialities that he recognised in these ancestral shamanic practices.

The Shuar tradition of shamanism, from the words of De Giorgio and Harner, is one of the purest and strongest still alive at our time. The participants in the gatherings of the association "Il Tamburo dello Sciamano" experienced a profound connection with nature and the spiritual world that they encounter during shamanic rituals that took place in nature (Il Tamburo dello Sciamano 2017). In my personal experience with the Shuar tradition I found what De Giorgio and Harner has described extremely pure and powerful practices, based on personal experiences that can deeply change the way we see the world.

# 3.1.2. The use of Ayahuasca

In several shamanic traditions of the Amazon, such as the Shuar tradition, the ceremonies with Ayahuasca are at the basis of all the practices that Western people would interpret as "spiritual". The encounter with the world of Ayahuasca challenged the vision of various Western researchers (Narby 1999). Several descriptions of the experiences in Ayahuasca picture a world different from our common reality, but as real as ours, if not more (Robert 2016). These experiences seem to lead to a decentralisation of the ego and the personal importance of the individual; the visions challenge the materialistic vision of the world and the participants experience a strong feeling of interconnectedness with the whole (Narby 1999).

The ritual involves techniques of alteration of consciousness that will allow the participants to enter into contact with other realities (such is the description of shamanic practitioners (Fotiou 2010)). Thanks to this altered consciousness it is possible for the participants to contact the spiritual world and to have experiences that involve an awareness of something greater and a sense of interconnectedness.

The ritual cannot be deeply discussed here since the practices have an esoteric component and the direct experience is the only way to fully comprehend a ritual.

#### 3.1.2.1. Scientific knowledge of Ayahuasca

Ayahuasca is traditionally made by a lengthy process of boiling plants of two species together, though many other plants can also be added to the brew. The two basic plants are ayahuasca itself (Banisteriopsis caapi), a vine; and chacruna (Psychotria viridis), a shrub. Chacruna, like many plants, and even the human brain, contains N,N-Dimethyltryptamine (abbreviated N,N-DMT; also known as DMT), which is normally understood to be the principal psychoactive component of the brew. If DMT is orally consumed alone, an enzyme (monoamine oxidase A) in the stomach quickly breaks it down, thus preventing it from reaching the

brain and having any psychoactive effect. However, Western pharmacology has discovered that, if plants and other substances containing DMT are drunk together with the ayahuasca vine, compounds in the vine collectively known as beta-harmalines (harmine, tetrahydroharmine and harmaline) block the chemical decomposition of the DMT and it is carried to the brain through the bloodstream (Dos Santos 2010, Roberts 2016).

#### 3.1.2.2. Safety in the use of Ayahuasca

The report of the International Center for Ethnobotanical Education Research and Service (2017) states that "The currently available scientific evidence on the acute and long-term effects of ayahuasca and the studies that employed it as a therapeutic tool with psychiatric populations suggest that ayahuasca is a substance with an acceptable physiological and psychological safety profile and with therapeutic potential (McKenna 2004, Gable 2007, Bouso & Riba 2011, Barbosa et al. 2012, Dos Santos 2013)."

In the Netherlands, through its website, the Jellynek Institute informs people on the use of different substances, one of which is Ayahuasca. The website reports Ayahuasca does not cause addiction and its use must follow some indications. The brew must be consumed during a controlled diet, without tyramine-rich foods. In fact, a hypertensive crisis can result from ingestion of tyramine-rich foods in conjunction with monoamine oxidase inhibitors present in Ayahuasca. The use must take place in ritual setting, where experienced guides can help people to control the experiences. Furthermore, Ayahuasca must not be consumed together with alcohol and drugs. The combination of ayahuasca with antidepressants of the TCA or SSRI type, dextromethorphan, amphetamine, MDMA or serotonergic opiates such as tramadol may cause serotonin syndrome (Jellynek 2017).

# 3.2. Research participants

The number of participants in the research is 17 (see Table 1. for details). Such a sample size allowed me to do an in-depth study.

The participants were selected through a purposive sampling method. As described before, I had encountered many people that took part in an Initiation to Ayahuasca. I contacted them and asked if they would like to participate in this research. Some of them were at first sceptical, not understanding why I should bring science into shamanism and vice-versa. However, when they comprehended the reasons that are behind this research, they happily participated.

I conducted the interview in the months of May, June and July 2018. The organisation of the interviews proved to be a challenge and it took longer time than expected, due to the busy schedule of many of the participants and the difficulty to plan a meeting. Furthermore, they live scattered around Europe, therefore, for time and financial reasons, nine interviews were conducted through Skype.

The full consent of each participant for being part of the research was sought beforehand.

Participant ID	Gender	Age	Location of the ritual	Date of the interview
1	M	40-50	Europe	June 2018
2	F	20-30	Europe	May 2018
3	F	30-40	Europe	June 2018
4	M	40-50	Europe	May 2018
5	F	30-40	Europe	June 2018
6	M	30-40	Amazon	June 2018
7	F	>50	Europe	May 2018
8	M	30-40	Europe	July 2018
9	M	30-40	Europe	June 2018
10	M	30-40	Europe	June 2018
11	F	>50	Europe	July 2018
12	F	40-50	Europe	July 2018
13	M	40-50	Amazon	July 2018
14	M	40-50	Amazon	July 2018
15	M	40-50	Amazon	July 2018
16	M	40-50	Amazon	July 2018
17	F	40-50	Europe	July 2018

Table 1. Details of respondents.

# 3.3. Qualitative design

The necessity to collect in-depth information drove me to the choice of interviews as the principal data collection method for this research. As Kumar et al. (2014) describe, interviewing is a better approach than surveys for the study of complex and sensitive areas. In fact, this research digs into spiritual, emotional and behavioural aspects of people's life that cannot be covered by fixed questionnaire's statements. The interviewer can introduce the interviewee into the topic and the nature of sensitive questions and explain difficult questions when necessary. During an interview it is also possible to probe or stimulate the respondent in other ways, in order to deepen the answers. Furthermore, the human contact during the interview allows the collection of more information, through body language, tone of voice, etc., that cannot be measured through a survey. Interviews are also adaptable to all kinds of people (old, young, illiterate, etc).

I chose the use of semi-structured interviews because of several benefits that they can provide: the planned structure guaranteed to be consistent throughout all interviews, without forgetting elements or changing the phrasing that could lead to different interpretation by the interviewees. On the other hand, the flexibility allowed me to diverge from the planned questions if the answers of the interviewees needed further investigation. Participants were interviewed through a semi-structured interview. The interview questions addressed the differences between the variables of people's connection to nature before and after the participation in shamanic rituals, in order to measure the perceived changes on participants' connection to nature due to the participation in the Initiation to Ayahuasca.

There is the need to mention the disadvantages of the interview method. First, it can be very demanding in terms of time and money. To reduce the costs, 10 interviews with participants living very far away (more than 1000 km) were conducted through Skype. Second, the data collected vary according to the quality of the interaction between interviewer (in doing the work) and respondent. Here, the semi-structured interview guide helped to keep in track the interviewees and to collect the necessary information. I have been very careful in not disrupting the participants' recovering process of their memories, following them in their line of thought.

Furthermore, my personal involvement into shamanism could have introduced personal bias. To tackle this issue, I always let the participants explain everything, also when they were thinking that I already knew the answer. I asked them to repeat and explain as they would be speaking to a new comer. I did not introduce my own shamanic experience during the interviews and never reflected on participants answers.

While building the interview guide for this research, I looked at the defined indicators of the conceptual framework and developed a set of questions that theoretically should have led toward the answer of those indicators. At the same time, I could not clearly state each of the indicators in the questions, otherwise I would have excessively steered participants' answers.

# 3.4. Data Analysis

The use of qualitative methods has the advantage of producing very rich and detailed data that directly derives from participants' experience (Russell 2006, Saldana 2009). Therefore, participants' own perspectives are left intact and these can provide different contexts for understanding if and how the participation in the Initiation changed the participants' connection to nature. Nevertheless, the data produced by a qualitative investigation require specific attention to avoid their misinterpretation (Anderson 2010). In order to avoid errors in interpreting the results, during the interviews I have been careful that people would explain themselves if the concept expressed was not clear and then I gave great space to direct quotes The design of this research has both a deductive and an inductive component. I investigated in detail the case, the specific answers of the participants, where I looked for important patterns, themes and inter-relationships, both to find out the perceived changes in the way people connect with nature due to the participation in the Initiation to Ayahuasca and to discover eventually what were the changes. I explored all data, registered the first findings and then

searched for confirmation in the accounts of other participants. The material was scanned several times, for both the first and the second coding cycles. In the second coding cycle, I investigated interdependencies between the codes and common dynamics in the stories of the participants that become even more meaningful because shared by several participants.

The process of analysis of the data provided by the semi-structured interviews involved the following steps:

- Transcription of the digitalised interviews
- First cycle coding
- Searching for patterns, themes, relationships, sequences and differences
- Second cycle coding
- Exploration of patterns
- Elaboration of small generalisations
- Linking generalisations to the body of knowledge to test the theory

The purpose of the data analysis is to answer the research questions and to test the perceived changes on how people connect to nature due to the participation in the Initiation to Ayahuasca. It was possible to extract new facts/insights/evidence, for example relative to particular patterns in the change of people's connection to nature due to the participation in shamanic rituals.

The analysis started with the transcription of the digitalised interviews into a text document. Some of the interviews have been conducted in Italian (since several participants came from Italy) and some in English. Therefore, I translated the Italian interviews into English. I could carefully limit the loss of meaning during the translation because I am an Italian native speaker.

Secondly, I used the software package Atlas.ti to start the first cycle coding. The software allowed me to organise all the interviews, to create different levels of coding, to create networks between the codes and to insert reflection for each code and citation.

For the first cycle coding, I combined two methods. I chose two elemental methods. The first method was the Structural coding with which I searched in the text material related to the previously defined indicators of people's connection to nature. The second method was the In Vivo coding (Saldana 2009), with which I coded all the material that appeared relevant to me and that was unexpected. The majority of the codes that I used came from the In Vivo coding method.

I repeated the first cycle coding three times. In fact, some codes resulted to be not relevant, or there was the need to combine codes that were equivalent, while other important facts escaped from my first review of the text and I coded only in a further round.

When I was satisfied by the first cycle coding, I started to create a network of all the codes, interpreting the connection between them and looking for the patterns that were emerging. Some patterns, such as the encounter with the "Other Reality", the change of awareness mentioned by the participants and the vision of a nature as composed by conscious spirits and beings, were so striking that they have been very easy to identify. I used a pattern coding method for the second cycle of coding, through which I filtered, highlighted and focused the most relevant features of participants' answers. This allowed me to generate categories, themes and concept that condensed the meaning necessary for testing/building hypothesis.

# 4. Results

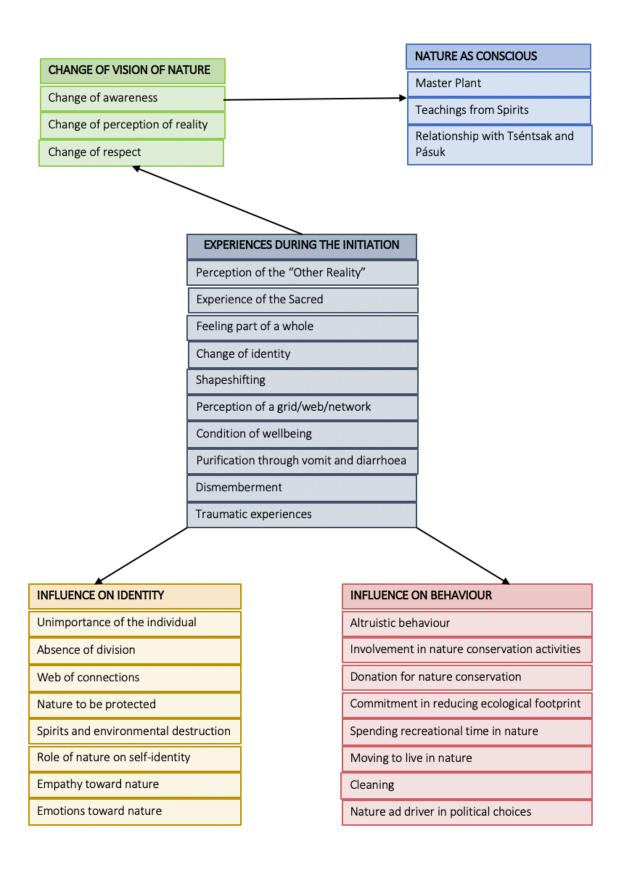
This chapter reports the qualitative results emerged from the interviews with the participants of an Initiation to Ayahuasca. The chapter is divided in four parts. The first is explaining, through the words of the participants, the experiences that they encountered during the Initiation. The journey into participants' experiences allows the reader to get the background information necessary to understand the origin of the result presented in the other three sections. Each of the following three sections refers to one of the three aspects of connection to nature that I identified in the conceptual framework.

The research question and research sub-questions are relative to the Initiation to Ayahuasca. Nevertheless, several participants underlined that, although the Initiation has been impactful, other important experiences happened in further shamanic work, such as other sessions with Ayahuasca or other rituals that they did in the context of their shamanic path. In the description of the results I make clear if the experiences happened in the Initiation or in other rituals.

The research is precisely focused on the effect of the Initiation to Ayahuasca on people's connection to nature. The starting point is therefore at what happened during that definite period of time of the Initiation. In Figure 2, a network of codes is shown which represents an overview of the experiences that the participants had during the Initiation to Ayahuasca and their new vision of nature, with the most common elements of the vision.

The codes presented in figure 2 emerged from the answers of the participants during the semi-structured interviews. The codes are grouped following the four sections mentioned above: a general introductory group of codes (grey box) that reports and explain the experiences that happened during the Initiation, a group of codes (green box) that describes the changed vision of nature of the participants, a group of codes that describe the concept of nature as a conscious entity (blue box), a group of codes (yellow box) that report the influence of the Initiation on the identity of the participants and, finally, a group of codes (red box) that report the behaviour of the participants before and after the Initiation.

From the analysis of the interviews it emerged that during the initiation to Ayahuasca participants encountered different experiences that seemed to be the sources of the perceived changes in the way people connected to nature after the ritual. In the next section, I will present these experiences. Afterward I will present the findings on the effect of the Initiation on the three aspect of connection to nature.



**Figure 2**: Network of codes that emerged from the analysis of the participants' interviews. Grey box: Experiences that happened during the Initiation. Green box: New vision of nature. Blue box: Nature as conscious. Yellow box: Influence the Initiation had on the participants' identity. Red box: Influence that Initiation had on the participants' behaviour.

# 4.1 Experiences during the Initiation to Ayahuasca

This section reports the experiences that the participants (N=17) encountered during their Initiation to Ayahuasca. The codes that report these experiences are not presented according to the three aspects of connection to nature introduced in the conceptual framework of this thesis. The experiences create a background of dynamics that influence all of the aspects of connection to nature, therefore I decided to present them together.

The most notable experiences that happened to the participants during the Initiation to Ayahuasca are:

- i. Perception of the so called "Other Reality"
- ii. Experience of the Sacred
- iii. Feeling as part of a whole
- iv. Change of identity
- v. Shapeshifting
- vi. Perception of a grid that runs through the universe, called also "web" or "network"
- vii. Condition of wellbeing
- viii. Purification through vomit and diarrhoea
  - ix. Dismemberment
  - x. Traumatic experiences

# 4.1.1. Perception of the so called "Other Reality"

Half of the participants clearly reported that they experienced an "Other Reality" during the Initiation. A few other participants described scenes that did not happen in the "normal" reality, which refer to another world. Participants themselves found difficulties in describing what is the "Other Reality", but from the interviews some explanations emerged that are reported in the following text.

Participant 9 simply described the "Other Reality" as the dissolvement of our material reality, the one that we ordinarily experience in our daily lives, and the entrance in another one. Participant 3 described it as "a world that you normally do not see".

Participant 6 said that during the Initiation that "you basically see the Other Reality, the barriers of ordinary life collapse and it becomes an uncommon experience where you see a lot of things. You can see the past, you can have suggestions about the future, you connect with nature, see things and meet spirits. As if I met God in liquid form!".

For participant 14, the Initiation itself is a mean to do various things, one of which is to "journey in the Other Reality, which is beyond this visible and therefore allows you to come into contact with the spirits that may be there or in other dimensions".

Going back to the experience of the participants, to enter the "Other Reality" seems to be a scary process for some. In fact, according to the words of participant 12, she was scared to enter this alternative world, because in that reality people have not reference points, they cannot steer things and decide in the same way that we are used to do in our normal lives.

When entering the "Other Reality", the trust in the Master Plant, the spirit of Ayahuasca, that guides and teaches who enters in her world (several participants identified the Spirit of Ayahuasca as a feminine spirit) seems also to be fundamental. In fact, participant 5, who was scared to lose the control in the experience, found

herself in the "Other Reality", without any reference, but she was secured by the fact that she was accompanied and guided by the Spirit of Ayahuasca.

At the same time, she said that the perception of the "Other Reality" was something unpleasant, because she saw people as if they would have been zombies, without awareness.

Overall, according to the answer of the participants, entering the "Other Reality" allows the "Initiated" to receive answers to their questions; about the self, about nature, about the universe. Participant 1 added that entering the "Other Reality" can be done "for reasons of healing, the body as it is in the other reality".

Participant 12 explained also something else. In her opinion, there is the need to be guided by a shaman when entering the "Other Reality". According to her, the reason is the following:

"If you follow a tradition, then a shaman who guides you, introduces you and directs you to the right spirits, [he/she] opens you the door of the Other Reality and allows you to see some things for which you wanted to receive an answer. A bit as if our shaman had made a map to be able to move within a forest, which is neither more nor less Ayahuasca. If one is introduced by a shaman, he says, "Look, be careful because that could be a tooth of a snake that could kill you." You walk, if nobody tells you anything, maybe you put your foot on it. There must be someone who teaches you to move in a different habitat from the one where we are used to walk. It is obvious that you make a bad end. It is not said, but it is possible. If one goes into the jungle and the crocodile breaks it, then you cannot scold the "Bad crocodile", it's nature."

## 4.1.2. Experience of the Sacred

Two participants described the Initiation as a sacred experience.

Participant 6 described the experience as a contact with the sacred, a divine power:

"For me it is absolutely the most beautiful experience. The sense of the sacred. It is the sense of the sacred in life. It's God, it's wrong to say God, but it's all. Understand yourself, understand things that surround you even if you cannot contain everything. It is the most sacred experience that has ever happened to me. I truly perceived the existence of something powerful."

Participant 2 explained that in her experience, the work with sacred plants, not only Ayahuasca, have the purpose to reconnect with the divine power that is already present in everybody.

#### 4.1.3. Feeling as part of a whole

The power of Ayahuasca and the entering in the "Other Reality", make people feel a deep connection with everything that surround us, according to the words of several participants. These experiences are particularly influent on the identity aspect of people's connection to nature.

Participant 6 used a direct language to describe this process:

"You are there, but sometimes you are not there. You waste yourself! As if you mix with everyone, a cauldron, a big sensorial soup."

Participant 8 stated that the alteration of consciousness provoked by Ayahuasca, made him experience a deep connection with everything, that he finally described as connection with the whole.

"In truth, when you take Ayahuasca and move into an altered state of consciousness, you begin to perceive and feel the connections and interconnections you have with all the environment around you. With people, with nature, with living beings, with things, with the areas of your life, with the organs of your body, then when you perceive ... you can also see them, like wires that connect people with each other or people with nature, etc. ... When you see or perceive these connections you realize that in reality there is a connection much wider than what you can see or perceive only on a material level. Since you do not see an end, because they are so many, and if you try to follow one, then you see it untangles itself to the infinite or almost, at least you do not see an end, you can feel the connection with the whole universe, because in fact the connection is with the whole. It starts from you and a bit 'of here and a bit of there ... you find yourself in the whole."

For another participant, the encounter with Ayahuasca enables that "you see the connection with nature. You feel part of a whole, but it's not just a single aspect, a single sensation. Sometimes you feel part of the whole, sometimes you feel inside a tree and part of the tree, there is not a single pattern of repeating feeling. It depends. Sometimes you feel connected to other people who are participating in the ritual."

Many others spoke about the feeling of connection. This will be presented in detail in the connection section.

# 4.1.4. Change of identity

For two participants the Initiation to Ayahuasca changed the perception of their personal identity. However, more participants reported that the change of identity was more common in subsequent experiences, when the initiated acquired practice.

#### Participant 4:

"Initiation, according to my experience, is a moment in which one's identity is cancelled. As if someone emptied you, you took away what you have inside and outside, to let in something else. This thing on the moment caused me a mad terror and a mad resistance; let's say a part of me was very strongly opposed to this, but then, during the initiation, I realized that the resistance, however strong it might be, would eventually be over and before it would have ended, before that kind of suffering would have ended. For me to resist was such a pain, a terrible thing. When I let it go, the pain went by and I realized that it was like someone knocked in my face a whole series of opinions, fears, anguish, convictions and I had to let go because they did not exist. But I don't remember too much. I remember a little. I have not the faintest idea... Sometimes I think about it, but I have not the faintest idea of what happened and what is the meaning of it. I'll find out."

# 4.1.5. Shapeshifting

At least five participants reported experiences of shapeshifting. This kind of experience, too, is directly linked with the identity aspect of people's connection to nature.

Some participants reported that during the night of the Initiation they experienced the transformation of their body, or part of their body, into those of different animals. The transformation into snakes or snakes' parts seems common. In many accounts collected, participants spoke about snakes.

A participant explained that shapeshifting is a technique that must be learned, even if it can happen spontaneously during the first experiences with Ayahuasca. There is a need of training in order to learn how to control the shapeshifting and use it with specific purposes.

Participant 4, in an experience during the Initiation, was out of his control:

"...it was as if my body was transforming. I was with another person, who then told me about an animal in which I had been transformed. I knew that I had turned into that animal, I wondered how could he have seen it? I turned into a black bird and I moved and held the usual positions of this bird and I had also changed the way my mind moved."

Another example is the one of participant 9:

"There was the jaguar trying to get out (from my body), my head was the jaguar's head and while I was throwing up and vomiting, the transformation was occurring."

Participant 8 spoke about what can happen to people during the Initiation and other Ayahuasca sessions:

"You can feel your body parts completely different from how you usually feel them, or because you have a kind of shapeshifting, so you feel them like a part of an animal's body, or because you feel more parts of your body, more appendages of your body like an animal with multiple appendages. You feel like an octopus, but you do not have eight arms in reality. It changes the perception of the body, or you can have a perception of the altered body, like a sort of dismemberment and then feel the parts of the body split. Or separate, you jump from one to another, or you may have difficulty perceiving who you are and where you are. This is more difficult, but it can happen."

Participant 6 described that during his initiation his perception changed, and he turned into a snake:

"It was like entering a tunnel, within myself, the perception of time and space had disappeared. I turned into a snake. It was me, a snake, a sort of boa."

# 4.1.6. Perception of a grid that runs through the universe, called also "web" or "network"

Another common experience that emerged from the interviews is the perception or the vision of a grid that runs through the whole universe. People described this grid as composed by luminescent wires, that run in all the directions. Others described the grid as a spider-web.

This perception has been reported by six participants. Apparently, the vision of the grid is accompanied by the feeling of being connected with the whole universe. In fact, some participants explained that the grid is the power that runs through the whole universe, creating it. It creates the "Other Reality", as well as our own world.

#### Participant 13:

"Ayahuasca taught me one of the fundamental things maybe, she showed me that the network which is at the base of the universe can be seen as a large spider web, where individuals are nothing but points that are joined by the spiderweb. There is this infinite network, like a web, of connections between all things. This base is feminine. A little difficult to explain. The Ayahuasca told me that the feminine is at the base of the universe. So, we of Western civilization give great importance to individuality, we are very selfish. In reality, in a global vision, we are not important. We are just knots of this huge network. What matters is actually the connections, the web."

#### Participant 14:

"Then the connection with everything was very impressing. This sense of absence of division. There is no division between beings. The appearance of the spiderweb, the matrix that keeps reality in place. Each of us is a point of this web and we are all interconnected. All beings among themselves are interconnected."

## Participant 3:

"I saw the aura of the trees, a huge clear bubble, then I saw the network of energy unravelling on the ground, like a grid in which there were intermittent drops of energy that flowed along the lines."

#### Participant 7:

"I had two daydreams. The first was in Tsunki's garden, where the plants started to dance. The sky has manifested itself as a silk cloth, blue, where a golden grid has been drawn, where all the intersections of this grating were ... You know when you paint people with the dashes, the two little legs, it was like that. There was this wonderful sky, with the grid, and where the wires of the grating formed the crossroads there were some little men."

Participant 8, speaking about connection, said:

"...you can also see them [connections], like wires that connect people with each other or people with nature, etc. ..."

Participant 11 simply said:

"There is a whole network that connects everything."

#### 4.1.7. Purification through vomit and diarrhoea

Ayahuasca, as widely known, can provoke vomit and diarrhoea. Different participants mentioned the role of this body reactions, explaining the significance of these for the initiated.

For example, participant 8 explained what is behind this effect of Ayahuasca:

"Visions provoke an effect of "Mar reacion", like the movement of the sea that rises and falls. During these transitions it is possible that there are physical effects, that the person has to vomit, this then raises the power and the visions become stronger. People could also have to go to the bathroom because they have diarrhoea. The person may have difficulties because he feels like drunk, these physical effects are part of the purification of the plant that you have, depending on the amount (how much beverage you drank) and allow the elimination of some toxins from the body and are used [these purifying powers] in some ceremonies even for doing this, as an aspect of curanderia. Subsequently within these visions you can also have pain on some parts of the body that are the points where our power is blocked or there is a very strong emotional tension that has accumulated. We feel the pain because it is actually the plant that tries to unblock this tension, this blocked power, is always part of

<sup>&</sup>lt;sup>1</sup> Curanderia: spanish term that means shamanic healing.

the plant's care. The natives, many of them, sing during the ceremony because they help to make the plant work better, to make the power of the plant flow better. The purpose is to unlock the power."

Other participants explained something similar to what he said. The diarrhoea and vomit provoked by Ayahuasca, according to participant's words, are an important component of the whole ceremony. The role of purification is in fact fundamental: it is through this purification that Ayahuasca can heal a person and can "unlock the power", opening the channels through which power can pass.

The purification, for some, was a painful and challenging stage of the Initiation. Afterwards, according to the words of participant 10, it followed by very pleasurable states of wellbeing, described by him as follows:

"I was very ill, my stomach hurt, and I could not vomit, I had to accept this thing. "Do that whatever you want" I said to the plant, she passed, I threw up and then it was an apotheosis."

Connected with the purification, as seen above in the words of participant 8, the plant can open channels. It is difficult to explain what these channels are. In the vision of the people interviewed, according to the experiences occurred during the Initiation, there are channels through which power flows in our body. Ayahuasca, as seen in above, has the power to clean/open these channels, purifying the body and helping people to get rid of different blocks.

# 4.1.8. Condition of wellbeing and post-wellbeing

From the interviews it emerged that after the stage of purification through vomit and diarrhoea, a state of well-being follows that occurs immediately after the Initiation or the following morning, or at both times.

Participant 7 said:

"I was dying. The feeling was that. Then I threw up and I had a great time."

Participant 10 even described the newly reached state as an apotheosis, while participant 6 described it as it follows:

"It was beautiful. I felt very powerful, but very humble. I felt I was in my environment, but I shared [the power of the moment? It was not clear]. The trees and nature in general, they understood this, and they were very kind to me. The trees caressed me, as if they had formed a sort of protection around me. As if they were willing to help me to continue to see how things are. Snakes cascaded in the river. I was feeling fabulous, I was fine, maybe I've never been so good."

Another quote from the experience from participant 6 was:

"The next day I'm fine, I feel really good, it's something that does good to me."

Participant 10 experienced a sort of renovation:

"Then, the next day, you feel a little thicker, especially in the morning, but you feel cleansed and despite not letting you sleep, you have an energy, a strength that is always new, you feel renewed, I feel like that."

Participant 12 described how Ayahuasca was making her feel a terrible pain, because she was taking off the pain of her disease. After the painful stage, she was: "Happy because then the next day I was better". Eventually, she managed to cure the disease with the help of the Shaman and of Ayahuasca.

Participant 9 added other particulars. In his experience it is the contact with powerful Spirits that cause this positive state:

"Natem also gives you a boost, it gives you the strength to see the Other Reality, in which you can also see the powerful Spirits that somehow coming into contact, they transmit their strength to you."

#### 4.1.9. Dismemberment

Few participants had an experience of dismemberment, but only one of them during the Initiation.

Participant 4 described what happened:

"It all began with me looking at the shaman; he was different. It was all wrapped in bright, concentric circles that expanded upward, to the right, to the left. Let's say that even the vision of reality was completely changing, I saw things I had never seen before. In fact, it was he who asked me, he told me, do this, do this. He gave me directions. But I also realised that I was looking for his presence because I knew, in some way, that I was losing myself. In fact, it was a tremendous experience because I felt physically destroyed first, all started from the right jaw, as if someone tore me in pieces of meat. Then rip this, rip this other, I physically dissolved. I no longer physically existed, but I always kept my ego. Then that disappeared too, and it was a monstrous pain, a very painful thing. A strange thing is that after [later during the initiation] it was also a pleasant thing."

Participant 14 instead spoke about a dismemberment that happened later in his shamanic practice to his identity during Ayahuasca ceremonies:

"It depends, every time it's different. At the beginning I could control it, my identity was detached from what I saw. Excluding the physical effects, I felt them in the body, but detached from my identity. For some years now, it's a much more engaging thing, during which the physical identity is broken down. You know it well ... if you remember well. The soul tends to dissolve, to be disintegrated. Then it steps into a dismemberment. I feel my body melting into the experiences I have. It is a very physical, profound thing in the soul. "

This experience seems to happen to few people at the first experience with Ayahuasca, while it is more common to happen to practitioners of the shamanic path, that are part of a shamanic training.

## 4.1.10. Traumatic experiences

Finally, I collected a series of experiences that happened during the Initiation that can be considered as traumatic. There is the need to underline the fact that the same experience can be perceived as extremely positive by some, while others can experience it in a traumatic way. For example, feeling the body of an animal during shapeshifting can be a pleasurable and exciting adventure or a terrifying transformation that the person wants to stop without being able to do so. Moreover, several traumatic experiences that involved fear and other unpleasable states, seem to have had a positive role in the personal development and growth of participants. I provide some examples.

Participant 4 (speaking of the dissolution of his identity during the Initiation, presented before):

"This thing on the moment caused me a mad terror and a mad resistance, say a part of me was very strongly opposed to it. But then, during the initiation, I realized that the resistance as strong as it could be, it would be terminated and that first it would ended, before that kind of suffering would have ended. For me to resist was a terrible pain, a terrible thing. When I let go, the pain went by and I realized that it was like someone knocked in my face a whole series of opinions, fears, anguish, convictions and I had to let go because they did not exist. This experience was so strong that for a week, when I came home, I had the thought when I went to bed about what would happen when I fell asleep."

Participant 5 did the Initiation with a guide that did not take good care of her. After this traumatic experience she searched for help, finding Tsunki and his community that helped her to recover from the trauma. In her own words:

"The plant has dragged me into nothingness, slowly, slowly, slowly. I had great panic because I screamed a lot, but the panic dragged me into a kind of death. It was like a continuous rain, a rain that increased and never stopped. I came across the "Other Reality" which was absolutely unpleasant, where everyone was like zombies and had no awareness. They were like robots and I said to myself "Oh, where I happened to be, I will never come back from here". Slowly, slowly, all the points of reference of this life have been taken away from me. As if I had felt like a vegetable, I could not even move and led me into a state of paralysis, to being paralyzed, I was no longer there, I could only produce noise, no need to eat, or drink. This feeling of infinity, timeless. So, a feeling so bad that I said, this thing does not end, I'm forever stuck between the two worlds. My feeling was that somewhere, beyond, there was something more beautiful, also here on this place where we live. But there I thought it was hell. "What an ugly hell!", I told myself, because it was infinite suffering. This was the first initiation. When it was all over, obviously I did not understand anything. I came home and found myself in a daily fear; I did not sleep for 3 months. I looked at myself in the mirror and, in my eyes, I saw something different. I was thinking of going crazy, going to the psychiatrist. I did not know who to turn to for help, to get explanations. So, I started looking for people who had similar experience, to understand what was happening. I really thought I was going crazy."

When I came to him (Tsunki), a year after this experience, I told him about my experiences and I found all of you dealing with Ayahuasca for years. I had several explanations, different shares and therefore I felt relieved and supported by the different people of the Circle. Tsunki obviously helped me as well, he explained what happened to me.

Then she added that despite the extremely scary and difficult period, on the contrary, thanks to it, she managed to learn new things and to have a personal growth:

"I swear to you that in that first year, I understood the people who do not make it and commit suicide, I understand them. I lived this thing and I understand them, they cannot do it anymore. In the sense that you lose complete connection with everything and in that second you kill yourself. I understood the great poets, from where they take inspiration. These were great revelations of the first year, I understood the scientists. Now I understand where the brilliant works come from. I understood the crazy people, too. They were curious revelations. So, the good things were there."

## 4.1.11. Summary of the experiences during the Initiation to Ayahuasca

The perception of the so called "Other Reality", in the stories of the participants seems to be the starting point of all the other experiences. It is in fact due to the alteration of consciousness and the perception of this "Other Reality" that all the other experiences take place. From the words of the participants, the "Other Reality" is everything they experienced when the perception of the ordinary reality changes. In their experience, they encountered a new world, where many things can be done. There it was possible to see things of the past and the future of their own life, to encounter Spirits and other Beings from whom they could receive teachings, and where they could experience a connection with nature and with the whole. Many participants stressed the fact that the Initiation to Ayahuasca stimulates the perception of interconnection with nature and with the whole. This is a fundamental finding of the whole research. Participants described this feeling or experience, in many different ways. They simply stated to feel this interconnection with nature and with the whole, they saw and perceived a grid that connects everything in the universe and, finally, some of them experienced shapeshifting and dismemberment, which enhance the feeling of interconnection.

Furthermore, the Initiation stimulates a process of purification that take place through physical reaction, such as vomit and diarrhoea. This painful purification is often followed by a state of wellbeing. Also, traumatic experiences that involve fear and unpleasant states can happen; nevertheless, these experiences can be a stimulus for personal growth. The digestion of this traumatic experiences is very much likely to happen if there is a shaman that follow the whole process, during and after the Initiation.

# 4.2. Change in visions of nature

This section is dedicated to the vision of nature of the participants. The vision of nature is understood as the definition of nature that participants gave during the interviews, in addition to other participants' stories and reflections related to nature and their perception of nature.

## 4.2.1. Definition of nature before and after the Initiation to Ayahuasca

I present here the definition of nature that people would have given before the Initiation to Ayahuasca and the definition that they gave after the participation to the Initiation. I need to acknowledge that the two definitions given by the participants were collected at the same time and they are based on the memory of the participants. I selected some of the most striking quotes, for the richness of the answer or for the strength of their statements.

#### 4.2.1.1. Pre and post-Initiation definition of nature of some participants

#### Participant 4

#### Before

"I have always loved nature, but let's say that before I did not have the awareness or a certain kind of awareness that somehow it always went increasing since I do shamanism. But from when I did the initiation, it is as if a button had been lit, then starting to rocket in the direction of the awareness that nature is not only what we see from the material point of view. I often went around the woods, in the mountains. Before, by nature, I meant places where there is no confusion, where there are not many people. Places where there are many plants or places far from where there are locomotion and confusion. I went there because it made me feel good, that's all, I did not ask myself many questions. I was fine."

#### After

"Now the perception of nature has changed, I no longer consider it as a circumstance or as having an aesthetic function, but as an integral part of the world. I believe that nature is part of a complex

living organism of which we also open ourselves, in the same weight, in the same way. Nature is alive, and if we try a little we can also talk. I would never dream of doing anything that goes against nature, indeed. The fundamental relationship is this, this kind of consideration and perception. Besides the fact that in nature there are beings with whom every now and then I dialogue. I speak in vision, not in a material sense, as we understand this material reality."

From this first before/after definition, already something peculiar emerged. The participant mentioned the difference in awareness, stimulated by the participation in the Initiation. This awareness went beyond the material reality, it made the person see that nature is alive and inhabited by beings with whom the participant speaks. The relationship with this alive nature stimulated a certain consideration for it, that became a deep respect for nature. In few words, for this participant nature, changed from being a nice and quiet place where he was feeling good, into an integral part of the world, alive and inhabited by conscious beings.

#### Participant 14

#### **Before**

I've always been attracted by nature, I've always liked animals, plants, but it was always a detached thing, I do not know how to explain. I have always lived nature with detachment, as if it was a thing in itself. I liked to look at plants, landscapes, I liked them more aesthetically I did not go further, not imagining another Reality, another world.

#### After

"Nature is a great living being, with all his children. It envelops us, it should envelop us, and it welcome us as if we were his children."

This participant, too, passed from considering nature as something detached from him, that he liked but felt distant from, to a great living being that welcomes us together with its children.

#### Participant 8

#### Before

"Before the initiation or before having made shamanism, difficult to distinguish, I would have told you that the nature was a complex system of organisms and microorganisms that came out, were generated by a series of myriads, of chemical and physical relations that, due to the laws of chemistry and physics, almost completely random, had generated on Earth, because there were the conditions, to proliferate, the proliferation of life and to create this complex order that is Nature and the balance created nature. Because Nature is on Earth, where there were possibilities for development."

#### After

"After this experience, nature becomes a group of consciences, of awareness, that are closely connected with them, among themselves and with us. Because we come from nature and live in it, in the world in which we are. The whole system is alive and conscious, is alive and thinking, much more than you might apparently think. This whole system of interconnections is much wider than we can imagine, and actually has to do, in general, a little with the whole system of planet Earth. It is not just a system of a local, or circumscribed, environment that manifests itself differently depending on the area of the planet Earth and the climates, but it is a connection that has to do with all the plants."

In this answer, participant 8 said that for him it is difficult to distinguish what nature was before the Initiation or before other shamanic practices. But then he answered what the experience of the Initiation changed in his vision of nature. In his answer, the vision of a conscious and aware nature emerges again, in contraposition with his previous vision that corresponded with a scientific explanation of biological life. The forms of consciousness that inhabit and constitute nature, are for him connected with each other and with us. Therefore, he sees himself and other people as connected with nature, because we come from nature.

#### Participant 6

#### Before

"I have always respected nature in general. Perhaps, it is precisely because of the nature itself that I asked myself if she were alive, if she could correspond with "The tree is alive!", These things like that. I wondered if there was a spirit, if there was a common connection between the plants, something like that."

#### After

"Nature is part of us. We are nature, we are in nature, it is not something that has been brought to our attention. That is: we are also nature, we are interconnected. For this we must try to know and understand it. For this we must know each other, because we come from nature, we are nature. If before I was connected, and I was fine in nature, now I understand it even more deeply. Oh, I'm not a biologist, but I feel a lot more connected to her. I get angry more than before if they cut a tree without reason, I feel more connected."

#### Participant 9

#### Before

"I would have said that nature is what lives. The set of living beings, organisms that have a life, which have a life force, plants, animals."

#### After

"I would say that from a certain point of view my idea of nature has not changed, nature is always a living organism, but now it is a living organism that I understand better. I understand, I see, as it is in the Other Reality. Not using shamanic terms, I cannot explain, I cannot find words. I see how the power of the Other Reality manifests itself in this. You have a more realistic view of things. Seeing what's behind this reality puts you in front of how things work in life, without filters."

In the vision of participant 9 the change has been partial, and more related to a different perception of reality. The vision of nature and things from the perspective of the "Other Reality" changed his comprehension. This comprehension is more realistic and without filters.

#### Participant 13

#### Before

"It's a bit difficult to say how I would have defined it before. First of all because it's been a long time ago and I haven't the same consciousness of before, it changes. I try to remember. Before nature was a place where I always felt good, in general, I was at peace and I felt at home, as I feel at home even now. I felt that nature was a place from which we come."

Participant 13 wanted to specify that the change of his vision of nature it has been due to the whole shamanic path, in which the role of Ayahuasca has been a consistent factor throughout:

"In reality the whole shamanic path made me change the vision of nature. The shamanic path began before I took Ayahuasca for the first time, so something had already prepared me, I had already deepened my knowledge of nature. For me nature is something alive. It is no longer something inert as I thought before, or something very detached from us. Of course, with Ayahuasca, with the very first experience, but also with the others, you realize it even more, because you perceive it, of the fact that nature is a very powerful and living place from which we human beings all originate."

#### Participant 3

#### **Before**

"I have always had a positive relationship with nature, but always a bit in a consumerist approach. I mean, being in nature made me feel good, how to say, I went there, but without awareness of what was on the other side. The fact that the trees, the forest or the place where I was living had its own awareness and its own right to exist. I did not think about it, for me I was fine (in nature) and that's it. But I was always the thinking and conscious being, while nature was something beautiful that had been put there, to make us breathe oxygen."

#### After

"From there I began to perceive, to consider nature as something more than what I considered a nice place to feel good, because it made me feel good. So, I opened my perception, to perceive nature, I do not know trees, a spring, a river, in a different way. With a different respect. If you consider nature, for instance a tree, as a thinking being, like you, as a human being, even if with different ways, it is a living being, with an awareness of itself. Then you can say, ok, I bring you respect. If you consider him a lower being because he does not have an awareness, you cannot bring him respect. Maybe you are a good person, so you do not do anything wrong, but that does not mean you bring him respect. Only if you can somehow compare it to yourself, in a sense, put it on your own level as a sentient being, then you can bring it respect. I began to feel this respect, when I began to perceive the tree as a thinking entity, to see that it has its own energy and it is not just a plant that breathes and makes photosynthesis and that's it."

Participant 3 wanted to stress that the difference of her vision of nature is properly to be found in the consideration of nature and all the living beings of nature as conscious beings. In her vision, if the person does not relate to nature and its beings in a conscious way, as another person provided with consciousness, there cannot be a true respect. A respect that is derived from being on the same level.

From the post-initiation definition of nature, three themes emerged consistently, and they will be presented with more detail after the before/after definitions. All of them together indicate a new vision of nature, therefore a change from before to after the Initiation.

#### The main themes are:

- i. Change of awareness
- ii. Change of perception of reality
- iii. Change of respect

## 4.2.2. Change of awareness

Participants, while describing their vision of nature after the participation in the Initiation, spoke about a change of awareness that manifested itself with different aspects.

The most mentioned change of awareness that happened, according to participant's experiences, is their awareness and perception of a conscious nature. In the accounts of the participants, there are spirits and beings with whom participants had a conscious relationship. They spoke with them, they interacted with them and they have been taught things by them.

The vision of nature as conscious will be discussed alone in the section titled "Nature as conscious", due to its vastness and centrality in almost all accounts.

#### 4.2.2.1. Change of perception of reality

I used a separate code called changed perception of reality, because some participants, along the interviews, spoke about a totally different perception of reality. As already seen in the section of the experiences that happened during the Initiation, some participants experienced another reality, simply called "Other Reality". It seems, from their answers, that this "Other Reality" is behind our ordinary material reality, is the fundament of all what exists. In this alternative reality, some participants saw how nature works, how the power flows creating nature and what exists. With this new perception of the reality, whatever it means for them, people experience a different nature.

#### Participant 4:

"I think it's a moment that determines a stop on everything that was there and a window opening on a new reality, a new vision of the world. Said briefly."

#### Participant 6:

"The perception that things are no longer the same as before. Things are revealed, in my opinion, in the way they really are. Surely it is more powerful within the experience itself, because the barriers of this reality fall. But they remain like a sort of frost, like water placed on a leaf."

#### Participant 13:

"It shows you and let you experience a reality completely different from the one in which we live every day. Authentic shamanism is not for the faint of heart."

For participant 1, the new perception is related with a higher understanding of things:

"Whenever I was looking for an explanation for something, things in my life or something bigger like the war, there was always something wrong with me. When I see how this power works in nature, then I see that it works the same way in my life and it's as if everything goes like ... "Ok, now there's nothing left that does not come back to me", on that stuff."

#### 4.2.2.2. Change of respect

As mentioned above, various participants described a different respect for nature, as one of the most striking components of their changed vision of nature. This enhanced respect catalyses also a different behaviour, that will be analysed in detail in the behaviour section.

The changed respect finds its roots in two main terrains: the active relationships with all the spirits and different beings encountered during the Initiation and, in general, along the shamanic path, therefore a relation

with a conscious nature and the feeling to be a small component of nature, therefore acknowledging the importance and the power of nature in their lives.

Participant 1, speaking about what is behind the increase in respect for nature, added:

"Well, having seen and known what is behind nature, then the plant world of trees, rivers. That is a world inhabited by spirits for the shamans, so I have deep respect for them."

As seen before, participant 3 added an interesting reflection, especially because it shows the difference between not harming nature and having a deeper respect for it.

"If you consider nature, let's take a tree, a thinking being, like you, as a human being, even if with different ways, it is a living being, with an awareness of itself. Then you can say, ok, I bring you respect. If you consider it a lower being because it does not have an awareness, you cannot bring it respect. Maybe you are a good person, so you do not do anything wrong, but that does not mean you bring it respect. Only if you can somehow compare it to yourself, in a sense, put it on your own level as a sentient being, then you can bring it respect. I began to feel this respect, when I began to perceive the tree as a thinking entity, to see that it has its own energy and it is not just a plant that breathes and makes photosynthesis and that's it. But you must perceive something more, compared to what you normally perceive. Using plants allows you to remove your rigidity from the way you perceive reality, making you more flexible."

#### 4.2.3. Nature as conscious

One of the most striking elements of the changed vision of nature given by the participants is the vision of nature as something conscious. From the words of the participants, nature and the entities that live in nature are beings with a proper consciousness with who participants interacted. In every answer, the participants expressed this. All of them did so, through different example. Due to the importance this element has, I dedicated this separate section to it, which describes in detail the understanding of what this consciousness in nature entails and how the participants experienced it.

I used three codes that are all related to the description of nature as conscious:

- i. Master Plant
- ii. Teaching from Spirits
- iii. Relationship with Tséntsak and Pásuk

The first code "Master Plant" identifies the Spirit of Ayahuasca as a Master. People explained why they called the Spirit in this way, the relationship that they established with the Spirit and the teachings that they received. The second code "Teachings from Spirits" is used to identify all the teachings that participants received from other Spirits that are not the Master Plant. The third code "Relationship with Tséntsak and Pásuk" identifies the relationship that participants developed with Tséntsak and Pásuk, who are particular Spirits or Beings (they were called by participants in both ways) that are central in the Shuar tradition.

#### 4.2.3.1 Master Plant

The majority of the participants called the plant, Ayahuasca, Master Plant or Master Spirit. They described how this Master taught them different things, in different ways. This implies equality of plants and human beings, that can be associated with the Partner with Nature role of the Images of Humans-Nature Relationship. Nevertheless, the deepness of the relationship with the Master Plant and the consequent experiences, for

example of dismemberment, could lead to the so called "Unio mystica" of participants with nature. The teachings can arrive through visions, through tests and challenges that the person must face, through conversations and also through feelings, emotions and awareness.

When asked to describe the Initiation with their own words, different participants defined the Initiation as the moment in which the Initiated is presented to the Spirit of the Plant, as we can see, for example, in the words of participant 8:

"It is a time when you are presented to what in the shamanic tradition is a very powerful spirit, like a very powerful person, very wise and very powerful."

Participant 2 said that the Master can help people to transform their lives, opening the eyes and the heart, teaching different ways to be in nature and to live. Participant 10 explained something particular, which has been then repeated with different words by participant 14: "The teachings of the shamans and those of Ayahuasca reinforce and confirm each other". Here are the exact words of participant 10:

"Tsunki's teaching triggers [Natem's teachings]. It is as if the two things reinforce and confirm each other. For instance, sometimes Natem shows you things, and his teachings [Tsunki's] help you to situate them, other times it is Natem that helps to give meaning to what he said and that you do not understand. So, it's like a circle. In reality it is as if Tsunki and Natem are quite similar, because it is true that Tsunki, being a man, a Western intellectual, is able to speak also to reason, but when he speaks the power of his words is like the power of Natem. It moves things inside us, which sometimes you do not understand right away or that are then moved by Natem. I think it's clear to you, but I do not know for an external audience."

#### Participant 11 added something else:

"She can show your ways of being, states of your conscience, things of your past. So, they can be different depending on each person. Ayahuasca makes you change, even a person who has never "done" (shamanic rituals) can have an openness of consciousness, even temporary, which then she will never forget."

To the question why she called the plant "Master" she answered:

"Because it is worth more than one session by the psychologist. In fact, she tells you things as they are, there are no cheats, there are no diplomacies. Since you see them, you cannot accuse someone else of cheating you, to tell you lies. You see them, and you feel them right on your skin. Pretty shocking because it's the truth. So, the reactions are very different depending on how one deals with them and also what makes you see."

Participant 3 specified the matter of the teaching she received, explaining how the focus of the person can steer the teachings that are going to be received and how the plant modulates the teachings according to what the initiated can receive:

"It was more about me. In the sense that, being a beginner, I was focused on myself. I asked for things about myself, my character, what I could do to succeed in the things I wanted to do at that moment. So, they were tips or food for thought that came to me. I felt the presence of something that spoke to me, but it used a language that I could understand. But it was all about me, because I was wondering about myself. The plant adapts itself to give you the knowledge one step at a time, because if she

shows you who knows what, you cannot understand. The Ayahuasca does this, at least that is my experience. With other plants it is different. I consider the Ayahuasca a feminine spirit, sweet, it presented itself in this way to me."

Participant 13 explained more the generic role of Ayahuasca as a Master:

"Ayahuasca is an entity, a spirit that comes from other worlds and comes here to teach us something, to guide us, and it is a master, substantially. I know this from a shamanic experience. It has its own character, sometimes even harsh and she is a bit like a great mother of the jungle, a mother that loves her children, but wants them to grow strong and healthy and manage to survive the difficulties of the jungle."

From the answer of the participants one can notice that the Master Spirit provides specific teachings to specific people. The difference can be due to the level of readiness and preparation of the Initiate, his or her focus, what the Master wants to show them, etc.

Another particular to mention is the fact that several participants referred to the Master Plant as a "she". In fact, participant 13 and 14 explained that the spirit of Ayahuasca is of feminine nature and connected with the power of the snakes.

The story of participant 14 can be another example of specific teaching. Being an artist, able to paint, the Master Spirit pushed him to paint his visions:

"The spirit of the plant dictates some things to me, it makes me draw. They are useful lessons for the shamanic healing, to the understanding of existence, it teaches me things about myself and about people I know. It makes me draw some things, lately often. It also makes me draw spirits and their appearance."

Moreover Participant 14 spoke about predictions that he received from the Master Plant:

"She showed me something that would happen soon to an acquaintance of mine, with whom I no longer had any relationship. What was shown to me, then I understood that it was related to that person. The next day, because it happened the next day. They showed me he would die. I did not see him, but I saw a scene, which meant that."

According to the above-mentioned statements, the teachings of the Master Plant covered various themes, such as:

- Awareness about the universe;
- Human, animal and spiritual life;
- Knowledge about the plants and their inhabitants;
- Personal attitudes, behaviour, personal choices and priorities;
- The ego and its traps;
- Diseases, their origins and how to cure them (according to participant's records, this happens only to shamanic healers);
- General wisdom;
- Prediction of future events;
- Ability to have conversations with other spirits or other beings;
- Connection between everything;

- Explanation of past events;
- Shamanic techniques (i.e. how to use the Tséntsak);
- People's vision of the self in relation to nature and the universe (see Section 4.3.1.).

#### 4.2.3.2 Teachings from Spirits

There are not only the teachings from the Master Plant, but the participants described the encounter with various Spirits who gave them teachings in different ways.

The story of participant 4's encounter with a bird can be an example of teachings from Spirits, which people can receive during the session. He told me that a bird guided him, and I asked him how the bird did so:

"How did the bird guide me? I realized that I was going upward. I think there were also eagles, this yellow beak [he called the bird yellow beak, because he remembers that it had a huge yellow beak], I saw it huge, I saw only that, everything else connected I did not see it. But he told me to go ahead and that in order to move forward I had to make choices, I always had moments when I had to choose. I could go in two directions, either right or left. The first times I chose wrong. Because I was wrong I do not remember it, but it was the wrong choice that led me to nothing. Then, after a little bit of jerky choices, always following this yellow beak that pulled me, he told me how to choose. I mean, I did not have to choose with my head, but I had to choose with my heart. This was what he wanted to teach me. The choice made with the heart was fine for me and for everyone, I think. Because then in the end it was as if it was a communion with humanity. At one point I disappeared, and I do not remember anything anymore and I stayed out four hours. This is what they told me, I recovered after four hours."

Participant 13 clarified how Ayahuasca can help the Initiate to get in contact, not only with her own Spirit, but with many other Spirits and beings. Here it is possible to notice that the participant sees himself in a partnership with nature. He said:

"With Ayahuasca you realise that the plants are inhabited by so many beings, beings of various kinds. Shamans call them Pásuk, Amazonian shamans, I mean. They can give you teachings. Even animals, insects, mammals, reptiles, etc. When you're with Ayahuasca they can talk to you and transmit things to you. I remember now that the first experience of Ayahuasca showed me this. I saw trees with a halo, with an aura. I could clearly see that they were alive, there was something more than what biology can explain. Biology analyses only a superficial aspect of reality, of nature."

Participant 10 explained that learning how nature works, through the use of the plant and the teaching of the shaman, helped him to realize and understand what happens in his life:

"My relationship with nature changed. For me (nature) it's the source of every teaching, it's the place where I go when I need to look for power, but also when I need to feel good, when I have doubts I do not look for books anymore, but I ask the plants, at the same time it is something challenging, something that always puts me in trouble, because when I spend long periods in nature, it is often difficult. Moreover, it always puts you in front of tests, so it is also a teacher. When I see how the power works in nature, then I see that it works the same way in my life and it's as if everything goes like ... "Ok, now there's nothing left that does not come back to me", on that stuff."

#### 4.2.3.3. Tséntsak and Pásuk

There are particular relationships that some of the participants described. These relationships were not being developed during the night of the Initiation to Ayahuasca, they have been instead cultivated during years on

the shamanic path. The first approach can nevertheless happen during the Initiation. They resemble the relationship that a general can have with an army. The beings involved in these relationships are called, consistent with the Shuar tradition, Pásuk and Tséntsak. From what emerged in the interviews, Tséntsak are beings that are created by Pásuk.

Participant 15 explained his relationship with the Pásuk and the creation of the Tséntsak as follows:

"I was attracted by nature and I understood later on Ayahuasca why. Because in reality, I was looking for the spirits, I was looking for their guide and their advice. I wanted to understand and only by being in nature you can perceive spirits in a complete way. They are easier to see, they are more powerful, it is the place where they live. Then I discovered the extraordinary power of the trees. Only after I discovered that they were inhabited by Spirits called by my tradition Pásuk, the people of plants. In the Shuar tradition, both initial and deeper works are done. The approach with the Pásuk is not immediate, there is a whole path to learn to relate to them. First there is an approach with their tools, the Tséntsak. They are the tools of these spirits. Before you gain familiarity with these and then maybe you become aware of the spirits themselves."

Also, according to the words of participant 13, Pásuk are beings that inhabit the plants:

"With Ayahuasca you realise that the plants are inhabited by so many beings, beings of various kinds. Shamans call them Pásuk, Amazonian shamans I mean. They can give you teachings. Even animals, insects, mammals, reptiles, etc. When you're with Ayahuasca they can talk to you and transmit things to you. I remember now that the first experience of Ayahuasca showed me this. I saw trees with a halo, with an aura. I could clearly see that they were alive, there was something more than what biology can explain. Biology analyses only a superficial aspect of reality, of nature."

#### Participant 8 explained what are the Tséntsak:

"In the Shuar tradition, Tséntsak are spirits that are acquired by training and given by plants and which are spirits that have a particularity that once acquired remain inside people, in the person's stomach. In fact, they also have a material component that lives in the shaman's stomach or the person who has been trained, the "Tséntsakero", the one that acquires Tséntsak. When one wishes to re-call this power, the shaman awakens his Tséntsak or feeds them either with Ayahuasca (also used for this reason) or awakens them with the smell of Ayahuasca and withdraws from the stomach this power of the Tséntsak. He calls them up from the stomach like a dribble that reaches the mouth and that is the bum of the Tséntsak, where these Tséntsak multiply. The shaman then blows this power on Ayahuasca, which in practice treats the plant. In practice, it connects the power of the plant with the power of the shaman and of the tradition and, thus, it also seals the Initiation. In fact, it is an initiation because there is a connection between the Ayahuasca and the shaman and the powers of the Tséntsak. The Tséntsak of the shaman are passed from shaman to shaman so they are Tséntsak that come from an ancient tradition of thousands of years ago and that have been passed down continuously throughout the centuries. Therefore, they maintain contact with all the previous tradition. Moreover, Tséntsak are used by the shaman to "cure" Ayahuasca: in the Shuar tradition he or she throws the Tséntsak in the beverage and then the shaman gives to the Initiate the Plant."

Participant 6 told me how Tséntsak have been helpful for him:

"Tséntsak have helped me in a lot of situations, they have to be maintained, they communicate to me from time to time. They can alert me in dangerous situations if something goes wrong. They must be fed with tobacco water, as the Shuar do. So, they taught me. They increase the power of vision in general. I noticed this because if I had ideas before when I was not very clear at the time, then I framed things better, in general."

#### 4.2.4 Summary of the changes in visions of nature of participants

The Initiation to Ayahuasca is perceived by participants to be a source of awareness transformation. People went beyond the material reality, experiencing the "Other Reality", "the fundaments of all what exists", to experience a nature that is alive and inhabited by conscious beings with whom people established durable relationships. It derives a certain consideration for nature, as an integral part of the world, for which participants felt a much deeper respect. Some participants started to see nature not as something detached, but a great living being, a conscious and aware nature in contraposition to the scientific explanation of biological life. Moreover, all the consciences that live in nature are seen connected by a universal web.

Initiation is the moment in which people encountered the Master Plant, the Spirit of Ayahuasca, from whom they received various teachings capable to transform people's life. Moreover, people established durable relationships with other Spirits and Beings, such as Tséntsak and Pásuk, that became sources of knowledge and power that people could use in their life.

## 4.3. Identity and emotions in relation to nature

In this section I present the results related to the affective component of people's connection to nature, divided per theme. Some of these themes may be partially overlapping, but I decided to keep them separate in order to better guide the reader and to cover more details derived from participants' interviews.

From the interviews emerged four themes that are related to the identity aspect of connection to nature:

- i. People's vision of the self in relation to nature
- ii. Nature to be protected/Spirits driving environmental destruction
- iii. Role of nature in the development of self-identity
- iv. Emotions and empathy of people toward the various forms of nature

#### 4.3.1. People's vision of the self in relation to nature

In the interviews people explained how they view themselves in relation to nature. To understand what I wanted to include here, one could keep in mind the question: "Who am I in relation to nature?".

Two main patterns emerged: the perspective that the individual is not important in relation with the greater whole and the absence of separation between the self, nature and the other beings. Moreover, several participants, as seen in the experience during the Initiation, saw that the self is connected with the rest through a web.

#### 4.3.1.1. Unimportance of the individual in relation to the greater whole

First of all, in the stories of five participants, I found out how the work with sacred plants changes the perspective that one has of the personal importance, in relation to the rest, to what is outside our own small individual "bubble". The experiences happened during the Initiation made these participants realise the unimportance of the individual in relation to the greater whole.

This new perspective pushes participant 3 to see the importance to be in balance with nature and the universe and to bring respect to them. Furthermore, she sees herself as a guest in nature.

"Experience with plants, expand your perception. Whether it is the Earth, the tree, the universe ... they make you see things that you would not see, and you understand that you are a small being, one among many and that you are not at the centre of the universe. It's all a discourse of balance at the end. I have this kind of perceptions, related to the respect I have for these places that are not my home. I am a guest!"

Also, participant 8 told how, in his new perspective, people are the guests of the "landlords", when visiting natural places:

"The relationship with nature, at this point, is a relationship with the landlords. When you are in nature, you are a guest of people who are welcoming you and therefore when you are a guest of people who are welcoming you, you have a certain care. When you go to the house of others and you are a guest, you have a certain care about where you are and the people who are welcoming you. Also, of course, when you live in areas close to nature, they are neighbours, so you try to maintain a good relationship with your neighbours. So, your relationship with nature, becomes a relationship with other living beings. So, you try to maintain a good relationship and have an exchange, maintaining a respect for nature and for the inhabitants and the beings who live there."

Other accounts remark this change of perception. In the following quotes one can notice a diminished importance of the self in relation to nature and all what exists.

#### Participant 9:

"Natem (Ayahuasca) shows you that you are a drop in a sea, which will dissolve in the sea at some point. This is actually an important point. People tend to live, I too, in a closed room. A small territory. When you take Natem, [you go] out of that territory and you do not know where it takes you, but that makes you understand that the world is much bigger than how you would think it is. You gain an awareness of yourself, of the fact that you are only a small part."

Participant 13 added a cultural consideration. In his opinion, Western civilization gives a great importance to individuality, while the ritual with Ayahuasca can show people their place in relation with the whole network.

"We of Western civilization give great importance to individuality, we are very selfish. In reality, in a global vision, we are not important. We are just knots of this huge network."

Beside these statements, there is the one of participant 10 who described the feeling to be small, in comparison with the power of the Spirit of Ayahuasca:

"On the other hand, it was perhaps the first time I gave up. I realized that to really take power, I had to give up everything that would happen. I realised that in front of Natem, I was small and that if he wanted ... if she wanted, because for me she is feminine, she could crush me in any way and decide that if she wanted to do it she could do it. That was the only way to take power."

#### 4.3.1.2. Absence of separation between beings and the web of connections

Some participants elucidated how Ayahuasca made them to see, feel and realise how humans are part of nature and how all what exists is connected. It seems that "Plants of Power" or "Sacred Plants" are able to bring people in a state in which the separation does not exist. The plural "plants" is used due to the accounts of five participants, who clarified that not only Ayahuasca has this power, but also other plants, such as the Maikuia (Shuar name for different species of the genus *Brugmansia*, used for important rituals), San Pedro and mushrooms containing the active principle Psilocybin. Shuar people use Maikuia for different purposes. Their traditional knowledge recognises the power of different species. For example, one of them is used to heal the fractures of bones (De Giorgio).

Participant 15 was speaking about the experience during his Initiation, when he described the connection that he was feeling:

"The connection with everything was very impressing. This sense of absence of division. There is no division between beings. The appearance of the spiderweb, the matrix that keeps reality in place. Each of us is a point of this web and we are all interconnected. All beings among themselves are interconnected. Some are more distant from each other, but this is only because two points of the web can be closer and two points further away."

Other participants described the connection they felt during the Initiation, too. Due to the central importance of connection in this research, I want to present several quotes, to avoid interpreting their words in a potentially inaccurate way and to present to the reader how different people experienced the connection.

Participant 13 described how he saw a network, like a base of the universe, that connects everything and how Ayahuasca taught him about the unimportance of the individual in view of the great network of the universe. Moreover, he explained that what really matters is the web and its connections. In this vision, a person should connect with the network and become a "channel" through which "higher spirits" can act. He added that this process can be a challenge.

"Ayahuasca taught me one of the fundamental things maybe, she showed me that the network which is at the base of the universe can be seen as a large spider web, where individuals are nothing but points that are joined by the spiderweb. There is this infinite network, like a web, of connections between all things. This base is feminine. A little difficult to explain. Ayahuasca told me that the feminine is at the base of the universe. So, we of Western civilization give great importance to individuality, we are very selfish. In reality, in a global vision, we are not important. We are just knots of this huge network. What matters is actually the connections, the web. In the shamanic path, especially the Ayahuasca taught me, it is important to be able to connect and see this network that unites all things and also become a tool for higher spirits, who have a wisdom and awareness much higher than ours. Doing this is not easy, you have to be able to tune into the universe. We must be able to empty ourselves, to be channels."

Participant 6 described feelings of being powerful and humble at the same time, while he was in nature, surrounded by trees and in a state of connection with the nature around him.

"Another time it was where a river is, in the mountains and I was connected. It was beautiful. I felt very powerful, but very humble. I felt I was in an environment of mine, but I was sharing it. The trees, and nature in general, understood this and they were very kind to me. The trees caressed me, as if

they had formed a sort of protection around me. As if they were willing to help me to continue to see how things are."

Participant 2 sees Ayahuasca as a means to reconnect with the world around us. She said that with Ayahuasca is possible to feel this connection inside the body and not simply through a rational understanding:

"I think the strongest thing that Ayahuasca gave me is to really experience the interconnection with the world around us. To really experience that you are not really separated from it, that is all one big web of life. We learn in our society that we are this island of the self and we are independent in a way, but that it is just not true. And when you do not just know by mind, by rationally understanding, but experiencing it with all your body, with all your being, I think it is much deeper. It integrates much deeper in your being, you know. This perspective, it is more real. Also, it makes you to change your behaviour, for sure."

Apparently, this connection is felt by many, but not all the participants had the chance to experience it. In fact, participant 5 said:

"I remember a person who told me that in this experience she felt a whole, she was part of the whole. She said it was a beautiful experience that changed her life. I wonder what it feels like to be one with nature, to feel the sap of the trees flowing or talk to the animals and feel empathy and harmony with everything around you. I have not lived this thing yet, but I would like to discover once, if it happens to me. I do not know, I do not want to imagine anything. This story has shocked me, I perceive that I am part of everything, but I live now in my way. Surely this harmony of being part of nature and everything around you is like this."

Participant 8 said that what happens during the Initiation as well as the perception of the connection and the realisation to be a small part of a great picture can also be a scary process or one to which people at first could resist in order to protect their personal importance.

"Often the lack of connection you have with nature is a lack of connection that you also have with other people and you have it because in some way you see your personal importance related to your person or your ego that then comes in first place. The rest, then also nature, secondly. Therefore, it is considered of minor importance, but simply because it gives too much importance to one's person. In Ayahuasca's rite, it may appear, and this may be a bit scary at first, but in the sense that it upsets you, it shakes you, because you never thought about it, because you somehow lose or you could lose ... you start to see how you really are, that is, much smaller and less important than what you thought before. This can shake you, but then it allows you to go to the other side and grow. Because inevitably it allows you to give the right value to the things around you, after you've given it to you."

Participant 16 felt a brotherhood with nature, through the effect of Ayahuasca that made him feel the empathy and the emotions, therefore going beyond the rational understanding of the importance of nature:

"After this thing, I started to feel something that before... As ecologist, I always valued nature, the elements of nature, the ecosystem, the importance of each of the elements, but it was more a mental thing that I had. I knew the reason why every element is important, but I did not have the love, the empathy, the emotions connected with. It was more mental. I knew, and I respected it, I have always been respectful, but through the ceremony I could get beyond the mind on why things are important

but feel it. It is difficult to put it in words, but I felt more connected. I felt more an emotional connection, more the connection that I feel with my sister and brother, more brotherhood."

### 4.3.2. Nature to be protected/Spirits driving environmental destruction

In the conversations emerged the perception of half of the participants criticise the patronising attitude behind 'saving nature' and they think nature can help itself. People should limit themselves to respecting nature and avoiding, as much as possible, to damage it in any way through human activities.

Participant 10 introduced something particular. In his vision, even the damage that we are doing to nature is not driven by our will, but by powers that can drive us to do so. In this way, humans, even when they cause damages, are anyway part of nature, the universe and the projects of "High Spirits" that in the shamanic worldview come from the stars and whose will steer the actions of other beings. He continues saying that there is not the absolute "good" or "bad", and environmental damage is not stemming from absolute good/evil separation. At the same time, he is wrestling with his own position towards this new insight. Here, I show his full argument:

"Nature is often seen as the poor child to be saved, a very arrogant vision. Or as what we must save, otherwise we finish in a lot of shit. On the contrary, a very selfish vision. We are the children of two contrasting mothers, one is nature, the mother who created us and the other is the one who raised us, which is the city and industrial capitalism, the industrial world. They are like two identities that I still cannot quite reconcile with, and yet I realize that I do not have the power to help nature. Perhaps, this is wanted by celestial spirits or the underground worlds, or there is a war in some way, but even this is part of the wars that take place in the Other Reality. When I see the sea full of plastic I find myself faced with something I would not like, I do not know how to deal with it and at the same time I feel that it is part of a project of spirits. The dualism came out, first I attributed what it was to say that men are assholes and then they did the pollution, now I realize that men act because they are driven by powers, then by spirits. Consequently, if they have built the industry and caused pollution, they are spirits that push in that direction and so this makes me be less Manichean, that is, without evil and absolute good. At the same time, sometimes I find it difficult to know how to behave."

#### 4.3.3. Role of nature in the development of self-identity

Many participants indirectly spoke about influences of the Initiation on their self-identity. Three of them were particularly explicit about this.

#### Participant 6

"Ayahuasca helps you to understand yourself, to understand things that surround you even if you cannot contain everything. It is the most sacred experience that has ever happened to me. I truly perceived the existence of something powerful."

#### Participant 11

"Initiation is a moment that can be tragic, or a transformation into good. It is always a transformation, it can be painful or pleasant. It is a transformation. She can show your ways of being, states of your conscience, things of your past."

#### Participant 2

"I think the plant ceremonies are much about reconnecting with the divine power that there is in yourself, which is also the force of life, that is everything in the whole world. I think this connection is always there, but this opens and clears it, brings it more to the surface and you learn also how to do this in your daily life: that it becomes more accessible, that you are more able to live from this connection, instead of all the clouded things in your mind and your ego and everything."

#### Lastly, participant 4 reported that:

"Initiation, according to my experience, is a moment in which one's identity is cancelled. As if someone emptied you, you took away what you have inside and outside, to let in something else."

#### 4.3.4. Empathy and emotions of people toward the various forms of nature

The emotions and the empathy that people feel for nature and its forms after participating in the Initiation are presented in following. Participants reported a change in empathy and the level of emotions that they have for nature. The relations with the Spirit of Ayahuasca, the Spirits that they encountered through Ayahuasca and the different awareness of what is behind nature are the catalysers of this change.

In the words of participant 14 there is a guide to understand the change in empathy and the role of the Plant:

"Empathy is total, I feel that compared to before, the level of empathy has changed, I feel that it is not just a mental conviction. I am more attentive to everything, to every living being, to plants, to rocks, because there is a spirit there, too. I am much more respectful. Things that were previously precluded to me."

He also explained that the new empathy he feels changed, not only due to the Initiation, but also due to the courses that he took with the shaman Tsunki. In fact, those courses create the possibility to interact continuously with spirits present in nature and this contact teaches to consider them. Participant 14 added:

"When you interact with them, they feel like living beings, that are there, present around us. Not as before, that I was considering nature with detachment."

Participant 15 said that the respect has always been there, but the emotional intensity is now different:

"First of all, the Master Plant approached my heart to nature. Before I looked for her, I liked her, I felt good inside, but I did not realise that I had to put my heart inside. In this sense, a lot has changed. Maybe, I do the same things, when I go for a walk I carry an envelope to collect the waste. In this it has not changed. Even before, I respected nature, but the perception I have in the heart of nature has changed. This is something that cannot be explained otherwise. Either you try it or you try it."

Another remarkable emotional change happened to participant 10, who, probably due to his connection with the Tséntsak, now feels very emphatic with plants:

"I do not know if they are the Tséntsak or what, I now have a strong empathy towards the plants, that if one tells me to become vegan, I say no, rather I eat only meat. It's absurd, but when I see a cut tree, it's like seeing a decapitated dog. It has the same effect on me. When I go to cut the rosemary to make the roast, it is as if I cut someone's arm, I do not know how to say. At the same time, I know it is part

of nature, so I accepted the violent nature of nature itself, I do not know how to say. I try to understand its limits and balances."

## 4.3.5. Summary of the influences on people's identity and emotions related to nature

During the Initiation to Ayahuasca, people realised the unimportance of the individual in relation to the greater whole, from which they derive the importance to be in balance with nature and to have great respect for it. The individual is seen as connected with everything else and nature has a consistent role in the development of self-identity. It helps to understand yourself and to pass through a transformation into good. In this vision, people are a small part of a great system, and nature is not in need to be saved from us, but nature is still our help. In this vision, people should bring respect to nature and avoid damaging it through human activities.

Through the initiation, people felt emotionally attached to nature, they developed relationship with spirits, beings and animals for whom they feel a greater empathy.

#### 4.4. Influence on Behaviour

In this final section of results, I present the answers of the participants related to the reported behavioural change derived from the participation in an Initiation to Ayahuasca. The results are presented according to the activity domains and indicators defined in the conceptual framework:

- Nature conservation related behaviour (involvement in nature conservation activities, donation for nature conservation)
- Use of nature (recreational time in nature, moving to live to nature)
- Politics of nature (nature as a driver in political choices)
- General behaviour towards nature (altruistic behaviour towards nature, commitment in reducing ecological footprint)

#### 4.4.1. Nature conservation related behaviour

In this section are included those activities for the protection of nature in a broad sense, in particular the involvement in nature conservation activities and the donations for nature conservation.

#### 4.4.1.1. Involvement in nature conservation activities

The participants have been asked to determine their involvement in nature conservation activities before and after their participation in the Initiation to Ayahuasca.

It resulted that three people who were not involved in nature conservation activities before, started to take part in those activities after the participation in the Initiation to Ayahuasca. On the other hand, two people that were involved before, terminated their conservation activities. They explained that they would like to take part in the activities, but they had not enough time and their professions drove them to live in big cities. (see table 2) Two other people expressed their will to be involved in such activities, but they could not for logistical reasons.

Table 2: Number of participants involved in nature conservation activities before and after the Initiation.

	Before	After	Positive change	Negative change	Absolute change
yes	8	9	3	2	+1
no	9	8			

#### 4.4.1.2 Donation for nature conservation

I asked the participants if they donated for nature conservation in the past and if this changed after the ritual.

It emerged that eight participants changed their habit and started to make donations for nature conservation while two were already donating for nature conservation before taking part in the initiation. Three of them also donated to support indigenous communities. (see Table 3). In the interviews the participants clearly stated that this change in behaviour followed the Initiation and the shamanic practice.

Table 3: Number of participants who donated for nature conservation before and after the Initiation.

	Before	After	Positive change	Negative change	Absolute change
yes	2	10	8	0	+ 8
no	15	7			

#### 4.4.2. Use of nature

In this section different modalities are reported through which participants used nature before and after the participation in an Initiation to Ayahuasca.

#### 4.4.2.1 Spending recreational time in nature

Almost all participants, except for those who for professional reasons live in big cities far away from nature, said to have increased the time they spend in nature due to the shamanic work. One participant said to have not increased the quantity, but the quality of time spent in nature. Here are some statements of participants related to time spent in nature:

#### Participant 12:

"Shamanism has certainly increased the time I spend in nature. When we have to do some shamanic acquisition work [acquisition of the Tséntsak], for 15-20 days in a row we have to be in nature in the evening."

#### Participant 8:

"Absolutely yes! Because here it is possible to reach the natural places much faster, much easier and there are some nice places."

#### Participant 4:

"Now, compared to before, yes. I go to nature very often during the week. Then I am also much more sensitive to all those organizations that try to defend and maintain the uniqueness of nature."

#### Participant 1

"Yes, now I spend much more time in nature. Around three times more."

#### Participant 14

"Certainly, more than before, I feel the need. In principle, I go there regularly."

#### 4.4.2.2. Moving to live to nature

Two participants have been so affected by the shamanic practice that they moved away from the city where they used to live to a natural place.

Participant 3 motivated the choice as it follows:

"It was necessary for me. I knew that if I stayed in Milan, I would be dead. I had this certainty, or I would have fallen ill. I had this certainty, I could not hold up so much. I could not do it. So, it is precisely the need for nature and the effect of distension and serenity."

#### 4.4.3. Politics of nature: nature as a driver in political choices

I asked the participants if they nature into consideration before anf after the Initiation when voting at the political elections.

Ten participants already took the party's position towards nature into consideration when voting before the Initiation to Ayahuasca while 11 started to do so after the Initiation.

Three of the participants that do not vote are not living in their country of residence; therefore, it is more difficult for them to vote and they do not. All three of them said that they would consider the positions of the parties on nature if they would vote (see table 4).

Although three more people than before started to consider a party's position towards nature related issues after the Initiation, two participants stopped voting since they completely lost faith in politics. They said it did not matter what people vote. One added that governments are not taking decisions, but banks and the financial system do.

Table 4: Number of participants who considered a party's position towards nature when voting, before and after the Initiation.

	Before	After	Positive change	Negative change	Absolute change
yes	10	11	+3	-2	+ 1
no	6	5			

#### 4.4.4. General behaviour

In this last section those activities toward nature are included that are more generic and not included in the specific three previous domains, such as altruistic behaviour towards nature, cleaning nature and commitment in reducing ecological footprint.

#### 4.4.4.1. Altruistic behaviour

In the interviews it emerged that some participants were personally involved in sharing their changed vision of nature with other people. They believe that by doing so, they would help to sensitise people to adopt a more respectful behaviour toward nature. In fact, changing the vision of nature could help people to become more respectful and conscious.

#### Participant 6:

"By doing shamanism I take care of nature, so I take patients in nature, and nature helps me in the cure. This is told to the patient that it is important to do the work in nature. Therefore, the patient perceives the natural place as important for his healing, for his improvement. Therefore, he begins

himself... he is led to improve his relationship with nature. So, let's say that I act directly in improving the relationship between nature and people."

#### Participant 3:

"As a single citizen I have tried in every way to sensitize people."

#### Participant 7:

"I work with groups of women and I organized for the summer instead of doing water gymnastics to do something in nature. So, people who come from different types of life, work and environment, came with me to do all this path. My goal was that it lasted at least the whole summer that they would get to enjoy it. These objectives were then obtained."

More than half of the participants reported to have the habit to clean nature from waste, contributing to a clean environment.

#### Participant 1:

"When I go to places, I do not urinate in the sea out of respect for the spirits that live there, as well as in nature. What I did before was not in bad faith, I did not really think about it, without knowing that I could damage that environment. Now I'm watching. I try to keep nature clean."

#### Participant 5:

"...if I go to the woods I carry a bag with me to collect dirt. It is an initiative that I would encourage everyone to take up"

#### Participant 6:

"... for example, compared to before I do not throw cigarette butts around, inside the Seine. I do not pollute. If I see plastic around in the woods, I pick it up. I see it like that ... You let me walk ... I do not hurt you... and I reward you with cleanliness."

#### Participant 13:

"I try to clean, not to leave garbage when possible. I clean up if someone leaves plastic."

#### Participant 8:

"Although I can act directly in nature, to try to keep clean the place where I go, I collect dirt that I find."

#### 4.4.4.2. Commitment in reducing the ecological footprint

Only two people, those who studied subjects related to nature conservation, really understood the question about the ecological footprint and they both have always been very committed with reducing theirs, especially by spending a great part of the year in eco-villages. They changed their travel habits at least partially. They also changed their food-consumption habits, buying local food as much as possible. The said the Initiation

made them to feel in depth the connection with nature and stimulated an emotional attachment towards nature, but the process of reducing ecological footprint was already started in their life. The Initiation reinforced the will.

#### 4.4.5. Summary of the influence on behaviour

Following the Initiation to Ayahuasca, people increased their time spent in nature, the donations they made for nature conservation and they became more altruistic towards nature. Moreover, some participants started sharing their vision of nature with other people, as a way to help others to change their attitudes towards nature. The relationship with nature established during and after the Initiation brought two people to move to live in nature (these are not the two participants that live in eco-villages). More than half of the participants started to clean nature, removing different kinds of waste. In addition, all the participants who vote in political elections take nature into consideration while doing it.

## 4.5. Synthesis of the major findings

The analysis of the interviews conducted suggests that the Initiation to Ayahuasca changes the connection to nature of Western people, stimulating a more responsible, respectful and committed behaviour toward the environment.

The major findings of the thesis can be synthesised as follows:

- 1. Initiation to Ayahuasca is a source of multiple experiences that result in a change of people's vision of nature: nature is perceived as conscious, as inhabited by conscious beings with whom people cultivate relationships and from whom they received knowledge for use in daily life;
- 2. Initiation to Ayahuasca influences people's identity, reducing the personal importance of the individual and stimulating a sense of connection of the self with nature and with the whole;
- 3. Initiation to Ayahuasca is a source of emotional attachment to and empathy with nature, other people and all that exists;
- 4. Initiation to Ayahuasca changes the behaviour of people, toward a more respectful, committed and responsible attitude toward the environment.

I found that the connection to nature changes in all its three aspects identified in the conceptual framework.

## 5. Discussion

This research has been conceived in order to contribute to understanding the potentiality of shamanic rituals in enhancing Western people's connection to nature.

Researchers studied different methods to enhance connection to nature, but a considerable gap in knowledge on enhancing connection to nature through spiritual practices. In fact, spirituality can raise connection between people and nature (Schroeder 1992) and I found, through my personal experience and observation, that shamanic rituals are powerful drivers of spiritual experiences and they could be a means for enhancing people's connection to nature.

Therefore, in this research I explored the impact of shamanic rituals on people's connection to nature, and on changes in environmentally responsible behaviour. This I did on the basis of the following research questions:

What are the perceived changes in the way Western people connect to nature due to the participation in a shamanic Initiation?

- a. What are the perceived changes in Western people's visions of nature due to the participation in a shamanic Initiation?
- b. What are the perceived changes in Western people's identity in relation to nature due to the participation in a shamanic Initiation?
- c. What are the perceived changes in the emotions of Western people toward nature due to the participation in a shamanic Initiation?
- d. What are the changes in Western people's reported nature-related behaviour due to the participation in a shamanic Initiation?

As seen in the results chapter, participants reported changes in all the three aspect of connection to nature, due to the participation in the Initiation to Ayahuasca.

#### 5.1. Discussion on results

Before the discussion of the findings in relation to the three aspects of connection to nature, I reflect on the experiences that happened to participants during the Initiation to Ayahuasca. Then, I will compare my findings with literature, in order to go deeper in understanding what happened to the participants and to see how other Western researchers explained phenomena encountered in my research, more precisely visions, the "Other Reality", Spirits and their relation with people's perception of reality. First, I will discuss various authors' explanations and theories on the visionary experiences and on the shamanic experiences occurred to the participants. Afterwards, I will discuss in detail the changes occurred on the three aspects of connection to nature. Finally, I will discuss the ontological transformation arose from the Initiation and the potential of knowledge form spiritual experiences for environmental education.

### 5.1.1. Experiences during the Initiation to Ayahuasca

In this section I will compare the main characteristics of the experiences that participants encountered during their Initiation to Ayahuasca with relevant teachings of shamans and literature.

The perception of the so called "Other Reality" in the stories of the participants appears to be the starting point of all the other experiences. It is in fact due to the alteration of consciousness and the perception of this "Other Reality" that all the other experiences take place. From the words of the participants, the "Other Reality" is everything they experienced when the perception of the ordinary reality changes (see Section 4.1.1).

In literature and in the oral teachings of the shaman Francesco Tsunki de Giorgio, I found many accounts related to the "Other Reality", which match with the stories of the participants. Shaman Tsunki says that "in the "Other Reality" everything of everything exists" and shamans of all the different traditions access this alternative reality with various techniques, for different purposes. Mircea Eliade (1964) described various techniques that provoke the alteration of consciousness necessary to reach the "Other Reality". Some of them are the aesthetic dance, a kind of trance reached through the perpetuated dance till the dancer is exhausted. Other are the use of drums, breathing techniques, abstinences, isolation for long periods of time and the ingestion of psychedelics such as Ayahuasca. Therefore, Ayahuasca is in principle a way to have access to the "Other Reality".

Participants also emphasised that the Initiation to Ayahuasca stimulates the perception of interconnection with nature and with the whole. This is an important finding of the research. Participants described this feeling or experience in many different ways. They simply stated to feel this interconnection with nature and with the whole, they saw and perceived a grid that connects everything in the universe and, finally, some of them experienced shapeshifting and dismemberment, which enhances the feeling of interconnection.

Shapeshifting is a practice known to men since the dawn of our species. In fact, men in the process of shapeshifting into animals can be found painted in some of the most ancient rock painting of the world (Hancock 2006), such as those of Fumanes (Italy), Altamira (Spain) and Lascaux (France). Shapeshifting can not only happen within the animal realm, but also with other natural elements, such as rocks, or also natural events, such as a hurricane (Eliade 1964). During these "complete" shapeshifting the body of the shaman remains inanimate, while the conscious essence of the shaman uses another form (Eliade 1964). In other "lighter" forms of shapeshifting, participants experienced the transformation of some body parts into those of an animal, and they did not have an out-of-body experience. Some participants reported that during the night of the Initiation they experienced the transformation of their body, or part of their body, into those of different animals. The transformation into snakes or snakes' parts seems common. In fact, in three accounts collected, participants spoke about snakes. This correspond to the beliefs of several Amazonian traditions, which represent the Spirit of Ayahuasca in the form of an Anaconda (Nevil 1998). The paintings of the shaman and artist Pablo Amaringo include consistently the snake. Other Western people that experienced Ayahuasca confirmed that snakes are common in the visions and that the essence of Ayahuasca is connected to that of the snake (Nevil 1998, Hancock 2006, Harner 2018, De Giorgio 2018).

In shamanic traditions all over the world shapeshifting is a practice extremely diffused. This practice has different purposes, such as the connection with the power of the animal, that allows people to acquire it and use it in their life's challenges, the gain of knowledge, the connection with other forms of life. The connection with the animals' powers seems to have also a therapeutic purpose and the shamans master the practice in order to use the power of the animal to heal patients or to achieve specific goals (Eliade 1964, De Giorgio 2018, Harner 2018). Some participants explained that shapeshifting is a technique that must be learned, even if in the first experiences with Ayahuasca can happen spontaneously. There is a need of training in order to learn how to control the shapeshifting and use it with specific purposes.

Shapeshifting seems to have effects on the long-term. The connection that people feel with the other "being" in which they are transformed modifies the perception of people in relation to those beings. It becomes an emotional connection, it modifies the identity of a person and it starts a relationship. According to my results, the relationship with "beings" who live in nature is one of the most important factors of change in the vision of nature of people, in the perception of people in relation to nature.

Furthermore, another particular experience is what participants called "dismemberment" (see Section 4.1.9). This experience happened to only one participant during the first experience with Ayahuasca, while it is more common to happen to practitioners of the shamanic path. There are several traces in literature on dismemberment, called by different authors in different ways (Eliade 1964, Hancock 2006, Harner 2018, De Giorgio 2018). Dismemberment is the dissolution of the physical body at the first stage, in which the participant feels the body splitting in pieces that then go in different directions. The dismemberment can reach

another stage, in which also the consciousness of the person is dissolved and an over-personal consciousness that cannot be really described in words remains, according to the words of shamans (Eliade 1964, De Giorgio 2018). Eliade (1964) wrote an entire chapter on Initiations through dismemberment, showing the importance of this ritual in shamanic traditions all over the world. This moment of transition seems to happen to transform the body of the initiated and this experience is a landmark in the path of who is called to become a shaman. The body of the initiate is disintegrated and then reconstructed with new attributes, for example crystals at the place of certain organs. There are similar accounts of these practices among populations scattered around the world, from Australia to South America to Siberia, etc. (Eliade 1964). A few participants had this experience, but none of them during the Initiation. Nevertheless, participants mentioned the dismemberment, as an indication of a long-term change in their connection to nature. In fact, the dissolution of body and personal identity into something greater, left in two participants a deep sense of connection. In literature I could not find any relation between dismemberment and connection to nature.

Finally, there are those that I called "traumatic experiences," because they have been lived by participants with unpleasant or very unpleasant emotions, sometime even terror. In her research on shamanism, Fotiou (2010) found something similar. As well as the participants of this research acknowledge, also those interviewed by Fotiou realised how this "bad" experiences are a great chance for personal transformation and growth into good. In the next section, I will compare these experiences with other spontaneous nature experiences which have effects on people's connection to nature.

#### 5.1.2. Nature experiences and connection to nature in literature

Various authors studied the connection between humans and nature. Between them, Matthew Zylstra dedicated considerable efforts to the topic and focused on the role of experiences in developing connection to nature, therefore with a similar approach to that of this research. For this reason, it is interesting to compare these experiences.

Zylstra (Zylstra et al. 2014) defined connectedness with nature as follows:

"Connectedness with nature is a stable state of consciousness comprising symbiotic cognitive, affective and experiential traits that reflect, through consistent attitudes and behaviours, a sustained awareness of the interrelatedness between one's self and the rest of nature."

What emerged from the analysis of the interviews shows a change of awareness and identity of participants that Zylstra (2014) would consider a stable state of consciousness, consistent with attitudes and behaviour. As the author warns, connection to nature is something very personal, therefore there is not one size that fits all. In fact, in this research I gave to participants a consistent freedom to explore and explain their connection to nature.

The experiences that happened to the participants during the Initiation could be related to those that Zylstra (2014) describes as 'meaningful nature experiences' (MNEs): "Powerful non-ordinary experiences with/in nature that are particularly profound, significant, affective and difficult to wholly describe."

#### He continues:

"MNEs can be triggered through a physical encounter with wildlife or with more symbolic phenomena (e.g. patterns, signs, metaphors, visions) perceived in nature. MNEs usually involve an awakened or heightened state of awareness with sensory arousal, emotional intensity and/or shifts in normal perception commonly reported. A sense of connection may be perceived, felt or intuited with the non-human "other" (e.g. plant, animal, landscape)."

This study shows that Initiation to Ayahuasca provokes what Zylstra calls meaningful nature experiences. In fact, during the Initiation, participants experienced an increase and change in awareness, emotional intensity, an extraordinary shift of normal perception and a deep feeling of connection with nature and with the whole (see Section 4.1.10). The difference is in the settings: Zylstra's MNEs were experiences more or less spontaneously encountered in nature, while in my research the experiences were the results of specific practices in a specific ritual setting. This means that connection to nature apparently can also be achieved spontaneously outside rituals.

#### 5.1.3. Visions, the origin and different explanations

In shamanism the visionary experience plays a very important role, and this can be seen in the results chapter, where many experiences of the participants happened in the realm of visions. For example, the encountering of the "Other Reality" happens through visions. I would clarify that visions, in the shamanic traditions, are not only a visual phenomenon. Visions can be physical, visual, sensorial including all the senses, awareness related, and emotional. In many indigenous cultures, there is not even a word that means "vision" connected with the sense of sight. For instance, the Lakota called them "Hanble", meaning comprehension. Therefore, vision was everything that would increase awareness and comprehension. The Shuar, whose tradition is involved in this research, use the word "Kara", meaning dream. There was no relation to the sight. Moreover, among the Lakota, the Medicine Men (equivalent to shamans) called Spirits of Nature "Fast Talkers", because they were receiving teachings from these Spirits in the form of speeches and these Spirits usually spoke very fast. Participants, as well, received teachings through conversation with various Spirits, such as the Master plant or the Pásuk (see Section 4.2.3.2.).

Western anthropologists used the term 'vision' because in our society the sense used to comprehend is the rational understanding of things, therefore the mind is especially connected with the perception of things (De Giorgio, 2018). Visions are used to communicate with spirits and other beings for different purposes, such as healing, sorcery, divination, etc. (Eliade 1964, Hultkranz 1973, Noll 1985, Lewis 1988, Winkelman 2000). Eliade (1964) also describes that shamans interact with spirits during a trance, during a non-ordinary state of consciousness. Altered states of consciousness can be induced by a variety of methods, such as dancing, drumming, fasting, pain, isolation, breathing alteration or entheogens. Shamans and shamanic practitioners can control the alteration of consciousness and the encounter with spirits, even if to different degrees. When a shamanic practitioner is strong enough, he or she can control some spirits and obtain knowledge and power from them (Eliade 1964; Achterberg 1985 as cited in Scott, 2014).

The non-ordinary reality, called in this research by participants the "Other Reality", where people met Spirits and other Beings, is understood by several anthropologists as a projection of intrapsychic dynamics (Vitebsky 2003) and not as something that exists independently of the human existence. On the other hand, in non-Western and pre-Christian Western cultures, spirits were and are considered to exist independently of the human existence. Within these cultures, spirits are able to affect human lives, for instance by causing and curing diseases, creating coincidences, favouriting the realisation of something, causing accidents as well as the death of somebody. This is also supported by participants' experiences and visions.

Western anthropologists and in general the Western academic world, were not able for a long time to accept the existence of spirits and other beings, confining them to the realm of phantasy or superstition. Therefore, a superficial and rational, if not pathologic, understanding of reality emerged (Shweder 1991), which did not accept cultural beliefs regarding spirits (Winkelman 2000; Zammito 2002). A turning point was when the psychiatrist Carl Gustav Jung introduced his concepts of the collective unconscious, the archetypes, and the individuation process (Scott 2014). Jung, in contraposition to the Western rationalist understanding, saw that the unconscious is not "a realm merely of chaos, conflict, and destructive passion, but the source also of all the forms of order created by the human imagination since man's first and most extraordinary formative achievement: the development of language" (Whyte 1978:72 as quoted by Scott 2014).

Jung's analytical psychology interprets the spirit world of the shaman as an expression of the collective unconscious and the archetypes that transcend humanity. The archetype, originated in a previous stage of evolution, if invested by a strong emotional charge, becomes "constellated" (activated) and it materializes in the material reality. In this way, Jung explained the foresight phenomenon and the power of coincidences.

Till this point, Jung and his contemporaries saw visions as having originated in the realm of the unconscious, and therefore an undifferentiated consciousness would originate in the animal realm. Hence, Jung's perspective was far from the shamanic perspective of visions, where animal consciousness is only a small fraction of the universal consciousness. After that, during the last years of his life, Jung elaborated the theory of the objective psyche, where reality is associated with the spectrum of light. According to Jung, what shamans call 'different worlds' are different wavelengths of what constitutes reality.

In this later theory Jung came very close to the understanding of the shamans. According to the teachings of Tsunki, for shamans, the "Other Reality" is a sea of consciousness that exists independently from us. If all the biological life on Earth would disappear, the rest of the "Other Reality" would continue to exist in the same way as before. The collective unconscious of Jung may find partial support in the shamanic vision, where the web of connections unites everything and life forms that are similar can be connected in a collective consciousness. The difference is that shamans consider everything as being conscious, not only the biological life or the animal life, as Jung was theorizing.

Richard Noll, a clinical psychologist, understood shamanism as a cultural tradition that promotes "mental imagery cultivation". In his view, a shaman is therefore devoted to the intended and sustained induction of enhanced mental imagery (Noll 1985:444). In this perspective, visions are not an end in themselves, but a means of giving expression to inner imagery. Noll's theory of visions, called by Scott (2014) the "cognitive pragmatic view", applies the concept of "states of consciousness" to the shaman's experience, understanding it as a psychic mode centred on mental images, which is distinct from the ordinary experience and consciousness.

According to Noll, the development of mental imagery techniques happens through two stages. The first stage involves "psychological and physiological methods of increasing the vividness of the images, by block[ing] out the noise of external stimuli of perception and attend[ing] to internal imagery processes" (Noll1985:445 as quoted by Scott, 2014). For Noll, externally directed processes and internally arising processes reflect qualitatively different types of mental processing. This internal/external division is also present in Jung's work and in neurophenomenological approaches to shamanism, and is apparently based in much broader trends in Western philosophy and epistemology (Langer 1967, Whyte 1978). Scott argued that "this dichotomy may or may not exist in the same way within shamanic worldviews; if and how it is articulated by any culture must be empirically, that is ethnographically, established". In the shamanic experience, this dichotomy does not exist. In fact, in the worldview of shamans there is not separation between the inside and the outside (De Giorgio, 2018). A Lakota Medicine Man, as reported by Tsunki, when asked what is inside men, answered: "Nothing!", explaining that going into a man would be like to pass through paper: "You would find yourself on the other side". The Medicine Man wanted to metaphorically explain that in the "Other Reality" a shaman sees the absence of separation between the inside and the outside. In addition, shamans and also some participants of this research experience the absence of time and space in the "Other Reality".

Moreover, Noll's theory of development of mental imagery techniques does not explain the source of information that participants received during the Initiation. For example, participant 14, during the night of the ritual, obtained from the Spirit of the Plant the information that an old friend of his would die soon, and the death occurred within a short time after the ritual (see Section 4.2.3.2.). In the years of shamanic practices, I encountered countless episodes of this kind, also in my personal experience. For instance, I received visions that told me things that would have happened in my future or in that of other people, and the predictions have often been confirmed by facts. With the understanding of Noll, which is that visions are a development of imagery techniques, we could read the future by using our imagination. On the other hand, shamanic practitioners from all over the world, coming from different cultures and also from Western education, realise

that they are in the presence of something external when experiencing the contact with spirits or other beings, something that exist on their own, with their own consciousness and knowledge and they are not the product of ourselves.

Shamans and shamanic practitioners never have visions for the sake of having them; there is always a meaningful purpose in the act of "travelling" to the "Other Reality". The shaman, in the words of De Giorgio, is a man of action. When he or she acts it is in order to create an effect in the reality, such as healing a patient, changing a situation, reading the future, acquiring knowledge, etc. In addition, shamans do not act in absence of external stimulation, on the contrary. For instance, during a session of Ayahuasca, all the external inputs come together into the visions, creating a background or also interfering with the visionary process.

The elements and symbols that appear in visions, must then be interpreted. In fact, as every shaman knows, visions must be interpreted, since only few of them are literal and can be understood as they are. In general, optical visions are constructed by the brain that tries to understand and create an order in the power with which it comes in contact (De Giorgio 2018). Here, the explanation of Jung gets partial confirmation by the words of a shaman. Nevertheless, the origin of the vision itself is different. The shaman understands that behind every symbol and element there is a certain power that can have a certain effect, also in the ordinary reality. Behind visions there are spirits and forms of consciousness that are independent from us. They exist independently from us, and participants accounts confirmed it.

Overall, I agree with shaman Tsunki that the comprehension of shamanic traditions, their rituals and the experiences that people encounter during those rituals cannot be reached without the direct experience of the same.

In the following sections, I will discuss how the shamanic experience of the Initiation to Ayahuasca influenced participants' connection to nature, in its three aspects defined in the conceptual framework.

#### 5.1.4. Change of people's Visions of Nature

As mentioned before, the Initiation to Ayahuasca changed people's Visions of Nature. The results show how consistent the change from the before and after vision of nature of the participants was.

Many participants described somethings similar, an impressive change of awareness mentioned throughout the interviews. The major change they described is that nature became for them something conscious and also the spirits and beings that live in nature are seen as conscious by them. Participants communicated with those spirits and beings and received teachings from them. The relationship with this alive nature stimulates a certain consideration for it, that develops into a deep respect for nature.

The Image of Nature mostly identified by participants is not a specific kind of nature (mountains, forests, jungles, etc.), but rather the consciousness of nature, an aspect that for the participants was fundamental. This nature has for the participants an intrinsic value, not dependent from the services that nature furnishes to people

The change in awareness that participants described is quite impressive. Many of them switched from a rational and scientific understanding of nature, as a biological system or simply as an environment, to something more complex. In my opinion, this is the key of the whole research: people experienced through the use of Ayahuasca a conscious nature and started to have a relationship with what they called "spirits" or "beings". Nature is not anymore something separated, detached, but it acquires a different value. It is inhabited by spirits and beings that participants deeply respect. Some participants were afterwards even scared to provoke any damage or offence to them. Participants also said they received a large amount of teachings and lessons from these spirits and beings, another factor that greatly increased the consideration and respect for nature and all what composes it. The direct relationship with spirts and beings in nature created a sort of pact and emotional attachment to nature, which resulted in a more consistent and pragmatic respect for nature. I say pragmatic because, as I will explain in more detail in the behaviour section, people changed their habits toward nature.

This involves a "Humans and Nature" relationship that corresponds to the category "Participation in Nature", in which the participants are a small part of a bigger picture. Moreover, the belonging to nature of the participants has a spiritual component derived from their direct encounters with Spirits and the relationships established. The participants showed also affinity for the "Partnership with nature" category, where nature is beside people and people and nature cooperate in a process of mutual development. In some cases, the participants experienced a *Unio mystica* state (Van den Born, De Groot 2010), where their identity was melted in nature.

It is clear from the quotes presented in the results, that having a relationship with conscious spirits and beings deeply affects the perspective that these people have for nature. Participants of the research of Fotiou (2010) also identified the encounter with conscious beings through the Initiation and these encounter stimulated a different perception of nature.

Moreover, participants experienced a different perception of reality. This change in vision does not only refer to nature, but to a whole change in people's perception of reality, that seems to be derived from experiencing the "Other Reality" and from the teachings received. This different perception covers a wide range of topics, from a different perception of time and space, to the sense of absence of separation between things, to a change of what really matters in life, therefore a change in the scale of values.

# 5.1.5. Influence of the Initiation on people's identity and emotions in relation to nature

The Initiation to Ayahuasca was source of several changes in the way people perceived themselves in relation to nature and the way they emotionally connected with nature. Some themes emerged from the results and they will be discussed separately in the following sections.

#### 5.1.5.1. Unimportance of the individual in relation to the greater whole

The results suggest that the Initiation to Ayahuasca influenced the self-identity of people to different degrees.

According to the answers of participants, the effect of the Initiation on one's identity varies from person

to person. Some participants felt a strong impact, other experienced the same only in subsequent experiences with Ayahuasca. This could be explained by differences in predisposition of the person to such an experience. Furthermore, many participants stated that there is a component of resistance of the person that can block or reduce some effects of the Initiation.

In several interviews people described that, together with the feeling of being connected with the whole, there is the experience of being or feeling small (see Section 4.3.5). This feeling, experience or different awareness, as described by them, changed the personal importance of the individual. This seems to lead to a less self-centred attitude and more altruistic behaviour toward people, other beings and naturew. This can be one of the drivers of change that changed people's behaviour toward nature into a more responsible one.

The enlarged awareness described before has an effect on the vision of the self and the self-importance, which again could have an effect on how people see and relate with nature and also with other people. It appeared that this experience could stimulate a more mature and less egocentric attitude of people toward their surroundings. None of the participants enjoyed the illusion of the self-importance being diminished, but results indicate it can be a path for personal growth and maturation.

#### 5.1.5.2. Absence of separation

In the results chapter it emerged that the Initiation to Ayahuasca brought the participant in a condition to see, feel and be aware of the connection they have with nature and also, as they said, with the whole. The Initiation stimulates experiences in which separation between the individual and the rest disappears. Several participants spoke about an "impressive" connection, absence of division and the "place" that every being has in the infinite web of the universe. Participants also described the beauty and pleasure of being connected with nature. Different experiences (see Section 4.1.) can be seen as drivers of this perception. For instance, several

participants saw a network, a web that runs through all the universe, connecting everything (see Section 4.3.1.2.). The perception of the web is also connected with the feeling of unimportance of the individual. In fact, some participants explained that while experiencing the web, they had the feeling that what is important are the connections between the 'knots' (knot is used as a metaphor for individual) of the web and not the 'knots' themselves.

Additionally, participants explained how deep and beyond the mere rational understanding this experience of connection was. In fact, according to participant 2 the emotional component of this experience enables that the realisation of the connection with everything deeply integrates with our being. This strong emotional and conscious connection to nature that participants experienced during the Initiation greatly contributed to an increase of their connectedness to nature and other beings in their daily life.

#### 5.1.5.2. Nature to be protected/Spirits driving environmental destruction

In my shamanic experience, I encountered practitioners that had insight similar to that of participant 10, who said that the damage that we are doing to nature, it is not driven by our will, but by powers that can drive us to do so. Therefore, when we destroy nature it is due to a "project" of some spirits that wish us to do so and these projects do not derive from a good/evil separation.

This vision potentially represents an excuse to continue with the usual behaviour, even when it is destructive. This stimulates the following reflection: the various experiences that people encounter in rituals can be interpreted differently by different people, therefore experiences similar to the one of participant 10 could stimulate a sense of helplessness and a lack of consideration for the outcomes of personal actions. The personal interpretation of visions can lead to very different results, which is another reason why the guidance of a shaman is important. A shaman can help the person to digest visions of the "Other Reality": Tsunki said to me and to other students that while learning to journey in other worlds, it is important to remain rooted in the ground of our own life. The shaman can help people to not lose the connection with their life while having strong experiences in the "Other Reality", avoiding for instance that the above discussed feeling of powerlessness becomes dominant.

In accordance with that, the Abuelo (grandfather) Vicente Jua, an old Amazonian shaman and master of Tsunki said: "Life is always a choice in our hands". Therefore, even when they attribute truth to these "high projects of spirits", people should always feel responsible for their actions.

#### 5.1.5.3. Role of nature in the development of self-identity

Participants described how the Initiation can be a moment of transformation of the personal identity and, in very few cases, a reconstruction of it. Participants got confronted with parts of their identity that were hidden, hence they learned something about themselves they did not see before. This process can be perceived as pleasant or painful, depending on the reaction of the participant in seeing newly discovered things of the self. Eventually, learning something about themselves, participants changed also their relationship with their environment and with other people. For instance, as discussed under section 5.4.1., participants saw that self-importance is irrelevant compared to the greater whole. They therefore became more respectful toward other people, spirits, beings and nature.

It is important to notice that every traditional shaman recognises that the transformation of an individual mediated by Spirits during the ritual has a scope that goes beyond the individual. In fact, the outcomes should benefits the community and other beings with whom the person will interact (Hamayon 2001, De Giorgio 2018). Shamans perceive in the same way the teachings that Spirits give to people through rituals; they may transform the self, but not for the mere beneficial effects the person can gain, but for the role that the transformed person can have on others.

#### 5.1.5.4. Empathy and emotions of people toward the various forms of nature

Finally, it resulted that Initiation consistently increased the emotions and the empathy that people feel for nature. Findings that have been already revealed by other authors (Salak 2006, Fotiou 2010). This is actually one of the key aspects of the whole transformational process. The affective component of the enhanced connection to people, nature and the beings that live in it, stimulated a change in behaviour that will be discussed in the next session. Again, I want to stress the fact that the emotions and the attachment that these participants feel now for nature, are stimulated also by a relationship with conscious being.

#### 5.1.6. Influence of the Initiation on people's behaviour

Overall, the Initiation resulted in a behavioural change. In particular, the Initiation was followed by an increase in donations for nature conservation organisations, time spent in nature and altruistic behaviour towards nature.

Some participants started sharing their changed vision of nature with other people after the Initiation. They believed that doing so, they would help to sensitise people to adopt a more respectful behaviour towards nature. In fact, as these participants recognised spontaneously, a change of vision of nature such as that caused by the Initiation can help people getting more respectful and conscious.

Moreover, several people felt encouraged to donate for nature conservation and some of them also to get involved into conservation activities. Two people, due to the Initiation and their commitment to the shamanic path, moved away from cities and went to live in natural areas. The reason is connected with the shamanic work, the relationship with their spirit helpers and the "need for nature" they felt while living in cities. More than half of the participants started to have the habit to clean nature during the time spent in it, for example removing plastic waste.

Only two participants really understood the question on the ecological footprint, probably since both of them are professionally involved in the environmental field. These two participants did a quite drastic choice in order to reduce their ecological footprint, namely moving to live in eco-villages and trying to live a fully-sustainable life. Although it is not directly within the scope of this research, the fact that most people were not aware of the definition of the ecological footprint indicated the need for a better environmental education of our society to raise awareness of environmental issues that we are facing and on how to avoid negative impacts on the environment.

Finally, it emerged that all the participants that vote at political elections, consider a party's position towards nature while doing it. The absolute change, before/after the Initiation, consist of a plus one person that consider nature while voting. Nevertheless, there is need to consider that five participants do not vote anymore for personal reasons. For this reason, it is interesting to consider that three people started to consider a party's position towards nature while voting.

Therefore, the experiences happened during the Initiation had a long-lasting effect in participants' behaviour. Overall, the Initiation to Ayahuasca resulted in a more environmentally responsible behaviour and this study supports other studies that relate connection to nature to a respectful and committed behaviour towards nature (Nisbet et al. 2009, Franz and Mayer 2014, Lumber et al. 2017).

#### 5.1.7. Merging ontologies

I argue that this research witnessed the merging of different ontologies and an epistemological transformation; a cross-cultural encounter between the Western scientific ontology and epistemology with those coming from shamanic traditions, in this particular case the Shuar tradition.

As mentioned before, the majority of the participants of this research are coming from a Western academic background, some of them come from exact science. It is interesting to notice, that this did not preclude them from having extremely powerful experiences, that go beyond the capacity of the explanatory power of Western ontology.

The perception of a different reality, the encounter with conscious spirits and beings and the teachings that participants received from them are clearly part of a very different worldview. Moreover, some

participants described that they start conversations with Pásuk and other Spirits when they want to receive answers and knowledge. In all shamanic traditions, shamans receive teachings directly from Spirits of Nature (Nevil 2006, De Giorgio 2018).

An example from this study explaining the change of the personal view on reality can be found in the explanation of Participant 10, for whom, through the use of Ayahuasca, the encounter with Spirits in Nature combined with the teachings of the shaman, increases his awareness and understanding of things. In terms of personal perceptions this is an example of a transformation, at least partial, of the ontology, epistemology and methodology in the view of this participant.

In fact, he perceives as real 'things' that Western ontology do not recognise, his justification of knowledge and beliefs is in the direct experience and flowing testing of knowledge in his daily life and as a method to acquire knowledge and understand reality he uses rituals and direct encounters with Spirits and beings (see Section 4.2.3.2.).

It goes beyond the scope of this research to investigate epistemology and methodology; their transformation through shamanic practices can be further researched.

#### 5.1.8. Teachings from Spirits and environmental education

There is indeed a component of education in the Initiation to Ayahuasca. The explanation of the educational component is however a difficult task. In fact, the teachings participants received during the ritual came from what they called "spirits" and "beings". Unfortunately, there is no way to prove the source of these teachings using our modern sciences, but their effects on the participants' vision of nature and reality as well as on their identity and behaviour are obvious (see previous discussion). This aspect can be summarised as "teachings from nature and its sons", where 'sons' is a term that participant 15 used to identify the spirits and beings that inhabit nature (see Section

Moreover, there is more research on shamanic guidance to intervention in nature, e.g. shifting cultivation (De Pater 2010), where the shamanic knowledge and spiritual values are behind forest management choices. In these cases, spiritual beliefs go hand in hand with extensive traditional ecological knowledge (De Pater 2010).

The potential of shamanism as a way to environmentally educate people should be taken into consideration. In fact, education can have a role in changing people's behaviour towards a more attentive attitude towards nature. This study contributed to the (already old) evidence that environmental education is not only about knowledge transfer, but also and foremost about experience. Experience, as shown also in this work, has been an effective driver of change in people's behaviour.

## 5.2. Discussion on theory

In the past years, extensive theoretical work has been done on the concept of connection to nature. The theories used for this research have proven to be coherent with my initial purpose. The operationalisation that I developed from the theories considered (Hilgard, 1980, Van den Born et al. 2001, Stedman 2002, Williams & Vaske 2003, Nisbet et al. 2009, Gosling and Williams 2010, De Groot 2010, Elands and van Koppen 2012) allowed me to collect, analyse, comprehend and report the components of connection to nature necessary to answer consistently the research questions.

There is indeed a big challenge embedded in conceptualising in different component a holistic thing such as connection to nature. As I said at the beginning of this report, the separation was an artefact, but necessary to study from an academic perspective the connection of people with nature. Actually, the very initial stage of naming connection to nature, is already a social construct, which as well involves separation (Fletcher 2016). The approach of asking the participants to define their own nature is a ploy, which, at least partially, limited the separation and rationalisation of the concepts, both of nature and connection to nature.

During the analysis of the interviews emerged the inherent intertwined characteristic of the topic, in fact participants provided answers that were difficult to disassemble through the defined indicators.

Nevertheless, the indicators defined beforehand provided an almost complete overview of the theme. It is worth to mention the category of Images of Human and Nature Relationship *Unio Mystica*, or Oneness with Nature, (Van den Born 2007:37, De Groot 2010). It has proven to be helpful in framing various answers of the participants that were less expected, for instance when during the Initiation few of them experienced a dissolution of the personal identity into a bigger natural and over-personal consciousness (see Section 4.1.4 and Section 4.2.3.1.).

Finally, considering the results of this research, in future study authors may want to add as an expected domain for Images of Nature of the Visions of Nature concept (Van den Born et al. 2001), the type of nature that people identify, the image of a "Conscious Nature", to identify nature when the characteristic that people identify as fundamental is the fact that nature is inhabited by conscious beings. In fact, participants of this research did and, supposedly, all those connected with shamanic or animistic world views would provide description of a conscious nature.

#### 5.3. Discussion on methods

This thesis fundamentally investigated experience, which took place in the realm of visions, in the "Other Reality", reached through the use of Ayahuasca during a shamanic Initiation. The ritual of shamanic Initiation and the use of the Plant have their roots in Amazonian traditions, which are based on very different worldviews. For this reason, the use of interviews as method of data collection has proven to be effective to let freedom to participants to answer without constraints. The data collected was extremely rich and I considered to present it using an elevated number of quotes. This helped me in not introducing personal bias while showing the findings and leave to the reader the chance to experience in their full potential the experiences participants lived during the Initiation.

My personal path with shamanism and personal relationship with most of the participants created a safe space that allowed participants to be open in delicate topics and in describing experiences that may be by some perceived simply as hallucinations. When researchers approach shamanism or other traditions based on different worldviews, without stepping directly into them, the explanation they will provide will be influenced by their own worldview. Obviously, a question can be asked: "Is that wrong?" With this reflection I enter the 'emic' or 'etic' debate ongoing between religious scholars, anthropologists, etc. that cannot be deepened in this thesis. Nevertheless, looking at my research as an example of academic approach for studying shamanism, I feel to suggest to anybody interested in conducting such a research to first spend a long time experiencing what will be then studied.

#### Limitations

In the following I will discuss some limitations of my research which I identified in the course of it.

First of all, three participants expressed their difficulty to separate the time before and after the ritual or before and after the practice of shamanism and therefore the effects of Initiation and other shamanic rituals could have been confused in their answers. In order to minimise this confusion, I stimulated the participants with further questions regarding the moment of the Initiation and then I asked them to reflect on how those specific experiences affected their vision of nature and the identity and emotions in relation to nature. At the same time, they did not have the same difficulty for what matter behaviour, in fact it was easier for them to track their activities before and after the ritual, compared to their vision and feelings. In the results, I specified before the quote of the participant, when the three participants encountered difficulty.

Secondly, participants are not randomly selected in the population, but a group of Westerners that practice shamanism; therefore, they may be people with specific attitudes, for example being more inclined and open toward a particular connection to nature than the average Westerner. To minimise this risk, I documented

carefully their vision, feelings, attitude and behaviour related to nature asking them to go in the past before the Initiation. Then I did the same for after the Initiation. Their perceived difference is what was important for this research. I assume that if a person was particularly inclined to a certain way to connect to nature, it would have already manifested itself before the Initiation through previous experiences.

Moreover, participants' answers are based on memory; answers may be biased and the effects that they associated with the Initiation, could instead have been derived from other shamanic and life experiences. Whenever people got confused and when they were not clear, I asked them to go back again to the Initiation and the connected experiences and then to link that experience or those experiences with further answers.

Furthermore, the behaviour considered in the research is reported behaviour. Therefore, we have no certainty as to its correspondence with real-time behaviour. Nevertheless, several studies have been conducted on planned behaviour and it resulted to be significative in predicting the actual environmentally responsible behaviour of the respondent (Kaiser, Wölfing & Fuhrer 1999, Armitage & Conner 2001).

Another important fact to consider is that the majority of the participants are part of the same community, and they have been guided by the same shaman. His role may have had a consistent influence on the changes reported. I don't see this directly as a limitation, but something worth to mention. The totality of the participants clearly stated that Ayahuasca must be consumed in ritual settings and not in "do-it-yourself" ceremonies. Shamans master the tradition and the use of Ayahuasca, create safe conditions for the Initiates and help them to comprehend experiences. If the role of the shaman is that important, for instance because it was him who enriched the environmental education of people, we have to consider that not only the use of Ayahuasca, but also the environmental teachings of the shaman are important drivers of change on people's connection to nature.

Finally, in the interpretation of the results, my long experience with shamanism, could be seen as a bias of the researcher. Anyway, in asking questions to the participants, reporting the results and discussing them, I have always been as true to evidence as possible, without interfering with excessive interpretation.

## 6. Conclusions and recommendations

I have looked at the effects of the Initiation to Ayahuasca, one of the most important shamanic rituals of the Amazonian shamanic traditions, on Western people's connection to nature. The ritual proved to be a source of various direct experiences that changed the ways of Western people's connection to nature.

As an initial remark and in accordance with participants' perspective, the Initiation should be considered with maximum respect and it should always be conducted by a shaman that can guide and support people in the process, during and after the ritual. A shamanic Initiation can be a profound and challenging moment of transformation; therefore, one should always be prepared for such a moment when considering to participate in such a ritual.

The most notable difference in people's vision of nature is the change of awareness and respect for a nature that they defined as conscious; in fact, Spirits and Beings that participants encountered have their own consciousness and knowledge. Participants received teachings by these inhabitants of nature and developed durable relationship with them. This greatly increased the respect and consideration that they have for nature. I argue that participants passed through an ontological transformation, perceiving Spirits and Beings of nature as real and conscious, while modern Western ontology usually does not consider them as such and when it does it reduces this perception to a psychological phenomenon. Indigenous ontologies can have a role in changing Westerners' relationships to nature and nature conservation organisations should pay great attention to the potential for these ontologies to result in "new bio-cultural conservation approaches that transcend the schism between nature and culture" (Verschuuren 2017:175). Moreover, for the participants nature has an intrinsic value that is not derived from the services that nature can provide to humans (however, this is not a peculiarity of those who experienced shamanic rituals).

After the Initiation, participants saw themselves as part of nature, as a small component of a great system. The ritual and the teachings received showed the participants how the single individual is unimportant compared to the greater whole and this realisation was not only rational, but emotional and physical. The teachings received were also a source of self-transformation, healing, knowledge and inspiration.

As for emotions, the experiences lived by participants stimulated the creation of deep emotional bonds with nature and its inhabitants. The relationships continued also after the Initiation, contributing to the increased respect for nature. The Initiation also stimulated empathy for other forms of life.

All that has been mentioned above resulted in a more responsible, respectful and committed behaviour towards nature. Participants became more committed in nature conservation, spent more time in nature and matured a more consistent altruistic behaviour in favour of nature.

For all these reasons, in this research I found some evidence that an Initiation to Ayahuasca conducted in a traditional way can be a useful means to reconnect Western people with nature and to possibly help to counter the current environmental crisis. Conservation approaches based on cultural and spiritual practices could be considered by Western conservationists (Verschuuren 2017).

#### Recommendations

The role that shamanism could have in our modern Western society is largely to be discovered yet. There are plenty of possibilities to enhance the knowledge in this field. In the following, I will discuss some approaches that would have the potential to push research in the field of shamanism forward, contributing to the reconnection of the Western society with nature.

First, research is needed to increase the external validity of this research, since the group of people surveyed in this study may not be representative of the entire population. Therefore, I would suggest an experiment, with participants who were selected randomly and would accept to participate in such research. The participants should be new to shamanism and willing to take part in an Initiation to Ayahuasca. The researcher should measure participants' connection to nature before the Initiation, few days after the ritual and one or more months after to assess the difference of changes in people's connection to nature in the short term

and the long-lasting effects of the Initiation. Obviously, this research would have to take place in a country where the use of Ayahuasca is legalised to avoid conflict with the law.

Secondly, the Initiation to Ayahuasca was chosen because is a ritual that potentially could generate a greater and clearer distinction between connection to nature before the Initiation and after than that related to other subsequent rituals. Nevertheless, from my personal experience with shamanism, I can say that other rituals have strong effects on people's perception of nature. Therefore, other shamanic rituals should be considered during future research to evaluate if they have the same or at least a similar effect as the Initiation to Ayahuasca on people's relation to nature.

Thirdly, an interesting and potentially significant study would be the comparison of the effect of the use of Ayahuasca under the guidance of a traditional shaman versus the "do-it-yourself" use. According to the words of some participants of this study, the use of Ayahuasca without the guide of a shaman is absolutely not recommended. Several issues may result from it; the story of participant 5 is a clear example (see Section 4.1.10.). Hopefully, this study helps to clarify the potential and the risks embedded in the use of Ayahuasca. I absolutely do not suggest an experiment that bring people to the "do-it-yourself" experience, but to research people that already did it, through a research design similar to the one I used here.

In the fourth place, it would be interesting to examine the whole shamanic path of a specific tradition within the framework of a PhD thesis. For instance, such a study could assess the connection to nature of people who are willing to start a shamanic path but did not do so by now. Then, following all the transformations of the participants' views and behaviour that occur during the first years of shamanic practice one could assess the changes occurred due to shamanic practice in a quite detailed way, leading to a better understanding of the impact shamanism has on people's connection to nature.

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#### 8. Annexes

#### I - Construction of the interview schedule

Operationalisation of research questions for the development of the interview schedule

Theme: Human-nature connectedness.

Specific topic: Spirituality and connection to nature.

Spirituality: shamanism.

Connection to nature: identity, meaning in the relationship with nature and reported behaviour in and toward nature.

#### Operationalisation of research questions in the interviews

Objective 1: to find out how interviewees defined nature before the participation in the ceremony of initiation to Ayahuasca.

Topic(s): personal description of the interviewees on nature

Aspects: feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

MQ 1. What did nature mean to you before the participation in the ceremony of initiation to Ayahuasca?

FQ 1.a. Can you give an example?

FQ 1.b. What about feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

Objective 2: to find out the connection with nature of people before the participation in the ceremony of initiation to Ayahuasca

Topic: memories of connection with nature before the participation in the ceremony of initiation to Ayahuasca Aspects: separateness, respect, sense of unity, physical connection; mental connection; spiritual connection, meaning of life

MQ 2. How would you describe your connection to nature before you participated in the ceremony of initiation to Ayahusca?

FQ 2.a. Can you give an example?

FQ 2.b. Can you tell something about separateness, respect, sense of unity, physical connection; mental connection; spiritual connection; meaning of life?

Objective 3: to find out how interviewees define the ceremony of initiation to Ayahuasca.

Topic(s): personal description of the interviewees on a shamanic rituals

Aspects: feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

MQ 3. What is a ceremony of initiation to Ayahuasca?

FQ 3.a. Can you give an example?

FQ 3.b. What about feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

Objective 4: to find out what happens during a ceremony of initiation to Ayahuasca.

Topic: general ideas of the interviewees on the ceremony of initiation to Ayahuasca

Aspects: change of: identity, sense of time, perspective; respect, interconnectedness, consciousness

MQ 4. Can you tell what you experience during a shamanic ritual?

FQ 4.a. Can you give an example?

FQ 4.b. Did you have any sensory experiences? E.g.:

FQ 4.b. What did you feel?

FQ 4.c. What did you see?

FQ 4.d. What did you hear?

FQ 4.e. What did you smell?

FQ 4.f. What was your sense of identity?

FQ 4.g. What was your sense of perspective?

FQ 4.h. What was your sense of time?

FQ 4.i. Did you experience interconnectedness?

FQ 4.j. Did you experience a changing state of consciousness?

## Objective 5: to find out how interviewees define nature after the participation in the ceremony of initiation to Ayahuasca.

Topic(s): personal description of the interviewees on nature

Aspects: feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

MQ 5. What does nature mean to you after you took part in the ceremony of initiation to Ayahuasca?

FQ 5.a. Can you give an example?

FQ 5.b. What about feelings; thoughts; ideas; visuals; sounds; smells; senses; consciousness

Objective 6: to find out the connection with nature of people after the participation in the ceremony of initiation to Ayahuasca

Topic: memories of connection with nature after having had a spiritual experience

Aspects: separateness, respect, sense of unity, physical connection; mental connection; spiritual connection; meaning of life.

MQ 6. How would you describe your connection to nature after you took part in the ceremony of initiation to Ayahusca?

FQ 6.a. Can you give an example?

FQ 6.b. On a scale of viewing nature as [separate and an instrumental tool] to [holistic and of equal value], how would you view nature?

FQ 6.c. Can you tell something about separateness, respect, sense of unity, physical connection; mental connection; spiritual connection; meaning of life?

Objective 7: to find out how the ceremony of initiation to Ayahuasca has changed the connection to nature of the interviewees

Topic: effects of the ceremony of initiation to Ayahuasca on connection to nature

Aspects: identity as a non-human, sense of time, egocentric vs ecocentric perspective; respect towards nature, interconnectedness with natural world, changing consciousness (time/ relations/perspectives), meaning of life

MQ 7. How did the ceremony of initiation to Ayahusca change your connection to nature?

FQ 7.a. Can you give an example?

FQ 7.b. What about identity as a non-human, sense of time, egocentric vs ecocentric perspective; respect towards nature, interconnectedness with natural world, changing consciousness (time/relations/perspectives), meaning of life?

Objective 8: to describe the stated behaviour of the respondents towards nature

Topic: stated behaviour of respondents towards nature before and after the participation in the ceremony of initiation to Ayahuasca

Aspects: spending time in nature, donations for nature, sustainability, taking care of nature, protecting nature

MQ 8. How would you describe your behaviour toward nature before and after the participation in the shamanic ritual?

FQ 8.a. Can you give an example?

FQ 8.a. How much time do you spend in nature per week?

- FQ 8.b. Do you donate money for nature?
- FQ 8.b.1. Would you eventually be willing to spend more?
- FQ 8.c. Do you try to take care of nature?
- FQ 8.c.1. Can you give examples?
- FQ 8.c.2. Are you committed in reducing your ecological footprint?
- FQ 8.d. Do you try to protect nature?
- FQ 8.d.1. How do you do this?
- FQ 8.e. Would you be willing to spend money on nature? (For example, entrance fees, buying of organic products)
- FQ 8.f. Is your connection with nature reflected in your political choice?