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#### Introduction

In this presentation, I would like to speak as a doctor on the one hand and a traditional practitioner of traditional Amazonian medicine since 1986 on the other hand. This dual practice has taken shape within the Takiwasi Center, which I co-founded in Peru in 1992 with my Peruvian wife, also a doctor and traditional practitioner, to offer a mixed model of care to address drug addiction problems. From this particular position, starting from clinical practice, I propose to point out some examples of "breaking points" in the dialogue between Western practices and visions of care and those of traditional Amazonian medicines, concepts that can be applied to traditional medicines around the world. We will thus address the question of extracts versus the totum of plants, the concept of the single body versus multiple bodies, the spirits or beings of nature, and finally the reality or ontological existence of spirits.

The approach to traditional medicines often suffers from a double reductionism: the pharmacological one, which only considers the molecules and active ingredients, and the socio-anthropological one, which tends to see only simple representations of the local imagination (metaphorical, symbolic, etc.). Pharmacologists and anthropologists share the same position of external observers who are not facing the suffering patient, in the practical and concrete dynamics of care. It is the doctor and the traditional practitioner who assume this function and can speak from the experience of the sufferers that they share and to whom they must respond effectively.

The communication gap between these different medicines can be ensured at least partially by therapists playing the role of "chakaruna", bridge-men as they are called by the Andean traditions that predicted their emergence in our time.

## 1. The experience of the Takiwasi Center

Takiwasi, Center for Drug Addiction Treatment and Research on Traditional Medicines, was founded in 1992, after 6 years of field research and self-experimentation with healers of the Peruvian Upper Amazon. Located on the outskirts of the small town of Tarapoto, it welcomes local, national and international patients that suffer from drug addiction for a in-patient therapeutic process, for a period of 9 months. The Takiwasi Center is officially recognized in Peru as a Health Center by the Ministry of Health.

The therapeutic model was developed based on data and experiences with local Kichua Chazutino traditional practitioners and has been enriched over time with contributions from indigenous

<sup>&</sup>lt;sup>1</sup> Opening Conference of the 1st International Conference on Traditional Medicine. One Health – Traditional Medicine (OHTM), Traditional knowledge and practices in the face of current challenges in health, research and development and sustainability sciences, October 18-19-20, 2023, Cheikh Anta-Diop University, Dakar, Senegal. Published in French in "Knowledge, challenges, research and development of traditional medicines today", edited by Jean-Yves Moisseron & Ouidad Tebbaa, Editions MA-ESKA 2025, pp. 21-40.

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traditional medicines from different parts of Peru and the world. It attempts to articulate this traditional knowledge with certain contributions from Western psychotherapy, allopathic medicine and alternative medicines. The therapeutic team therefore includes doctors, psychotherapists and traditional practitioners. This is a unique pilot experience of concretely establishing a bridge between Western knowledge and traditional knowledge.

A particularity of the therapeutic protocol consists in the induction of modified states of consciousness (MSC) by the ritual use of traditional psychoactive plant preparations, including ayahuasca<sup>3</sup>, in order to allow an exploration of the unconscious underpinnings of drug addiction, without leading to any form of dependence or substitution. The semantic dimension (what makes sense) and the transpersonal (even mystical) experiences, in an initiatory framework, are based on a synergy between Western spirituality and Indian cosmogony, beyond any affiliation to a constituted religion.

Takiwasi also has a research department in exact sciences and human sciences<sup>4</sup>, a computerized system for collecting data from its therapeutic practice, dissemination<sup>5</sup> and training departments, a laboratory for developing natural products from Amazonian plants, and leads projects with local populations for the protection of Amazonian biodiversity, sustainable development and fair trade.

#### 2. Model validation

In the field of addiction treatment, traditional medicine has proven to have much more effective resources than those of Western medicine (Bopp, M., & Bopp, J., 2011; Chiappe, M. 1968, 1974; Mabit J., 1993). Since its beginning of operation, the Takiwasi Center has been continuously evaluating its activities, its patient population and the results of therapeutic interventions (Giove 1996, 2002; Mabit, 2007; Mabit & González, 2013) in order to constantly improve its model. The study published by Dr. Rosa Giove in 2002 shows that in a group of 100 former patients contacted two years after leaving the Center, the recovery rate is 54%, reaching 67% when considering only patients who completed treatment. To avoid self-assessment bias, external and independent researchers were convened with academic institutions of world excellence such as the Centre for Addiction and Mental Health (CAMH) in Canada and the University of Fribourg in Switzerland. More than 70 research works for degree or master theses have been published.

#### 2.1. Takiwasi patient profile and severity of addiction

Comparing the Addiction Severity Index (ASI) scores of Takiwasi patients with a sample of drugdependent patients from the United States, on average Takiwasi patients present a comparatively

<sup>&</sup>lt;sup>5</sup> As of June 2022, Takiwasi Center researchers have published a total of 65 journal articles (as lead or coauthors), contributed to 39 full-chapter publications, delivered 22 lectures at international meetings, disseminated 40 articles online, and published 10 books.



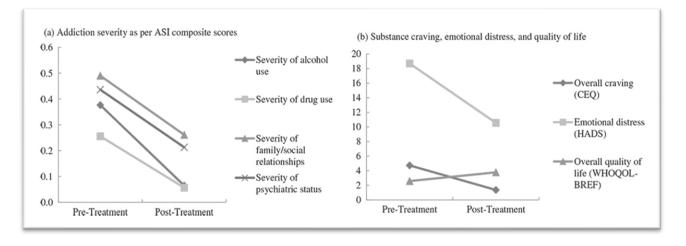
<sup>&</sup>lt;sup>3</sup> Ayahuasca is an ancient psychoactive brew from the Amazon composed of the ayahuasca vine (*Banisteriopsis caapi*) and a DMT-containing additive, most commonly the leaves of the chacruna bush (*Psychotria viridis*). It is traditionally taken during collective nighttime ritual sessions led by a master healer (*ayahuasquero*).

<sup>&</sup>lt;sup>4</sup> Between 1997 and 2022, 110 studies were published by researchers external to the Center.

more severe problem in the psychiatric and drug use domains (O'Shaughnessy et al., 2021). The Takiwasi treatment model attracts a heterogeneous group of patients from Peru (42%), other Latin American countries (34%), and North America/Europe (24%) (Berlowitz et al., 2020), with the main consumption drug being cannabis (72%), alcohol (52%), cocaine/PBC (48%). Polydrug use is a common feature of Takiwasi patients, affecting 84% of them (O'Shaughnessy, 2017; Berlowitz et al., 2020). These elements demonstrate the great plasticity of the therapeutic protocol. Many patients have tried several conventional treatments before arriving at Takiwasi, which is considered a last resort (sometimes desperate), suggesting a certain severity of addiction in patients who come to the Center (O'Shaughnessy, 2017).

## 2.2. Efficacy in the treatment of drug addiction

Studies show significant improvement during and after treatment completion for a wide range of factors examined, including severity of addiction, physical health, neuropsychological functioning, emotional health, depression, anxiety, emotional stress, and craving (Berlowitz et al., 2019; O'Shaughnessy et al., 2021). In contrast, perceptions of quality of life significantly increase. All of these changes appear early in treatment and are maintained over time (O'Shaughnessy et al., 2021).

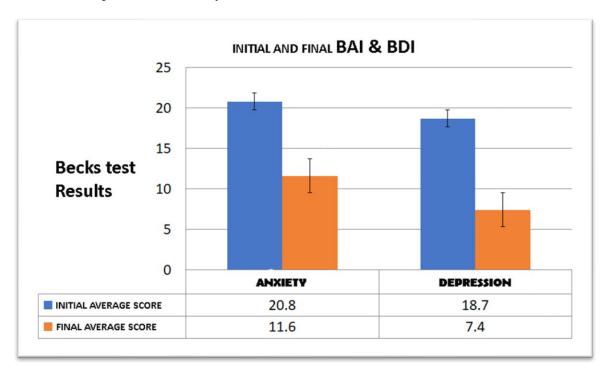


### 2.3. Efficacy in the treatment of depression and anxiety

From 2016 to 2022 a multidisciplinary and international research team in collaboration with the CAMH of Toronto (Canada) has led the Ayahuasca Treatment Outcome Project (ATOP), a research through which more than 100 Takiwasi patients have been evaluated with a follow-up up to one year after therapeutic discharge, associating quantitative data related to the severity of dependence, comorbidities, quality of life, etc., with qualitative information that collects the experiences of patients before, during and after treatment (Rush B., et al., 2021). The Takiwasi treatment model has proven to be very effective in treating depression and anxiety that often go hand in hand with addiction. At the end of treatment, we can observe significant reduction in mean anxiety scores (from



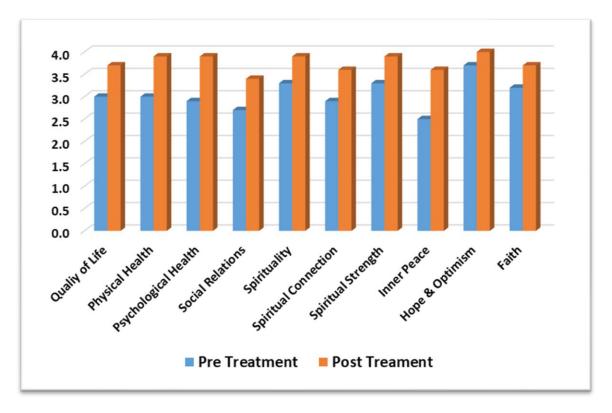
20.8 to 11.6) and depression (from 18.7 to 7.5). Patients with opioid dependence have the greatest reductions in depression and anxiety scores.

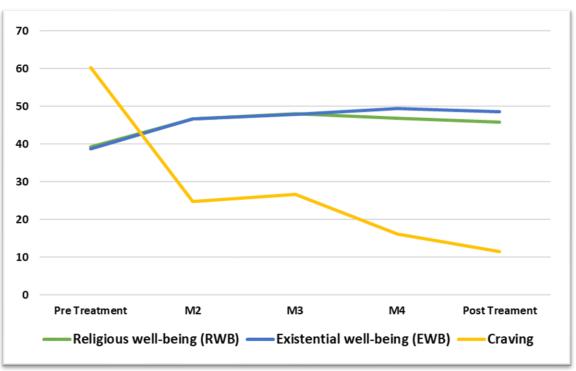


# 2.4. Improving quality of life and spirituality

The importance of the spiritual dimension including "symbolic death" and its initiatory effect has been highlighted (Denys, 2013) as well as the association of a significant improvement in scores related to quality of life and spirituality with a reduction in craving (Berlowitz et al., 2019; Giovannetti, 2020). Another study shows that the same positive correlation occurs between the improvement of spiritual/religious well-being and the reduction in the desire to consume drugs (O'Shaughnessy et al., 2021), The treatment generates an ability to develop a certain resistance to stress over time. Patients often describe their process as a kind of "training", a "school of life", more than a simple treatment.







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### 3. Obstacles or conditions for dialogue

The interaction between traditional medicines and Western science, established around the Takiwasi project, has revealed a series of obstacles in the conceptions of these two paradigms, places of incomprehension, misunderstandings and sometimes a real dialogue of the deaf. The clinical results reported previously allow us to affirm both that, in the approach proposed by Takiwasi, some of these obstacles have been relatively well identified and that they have been overcome by an open and coherent strategic approach.

The identification of key points that reveal a contradictory approach to reality, illness and health, has highlighted ideological or conceptual foundations, generally unconscious, carried by the cultural and social context, transmitted non-verbally, as if by a sort of progressive osmosis and rarely formulated in a clear and concise manner, which, ultimately, thus serve as indisputable truths on both sides.

The World Health Organization (WHO) has taken into account this difficulty of misunderstanding and again in the document on the "WHO Strategy for Traditional Medicine for 2014-2023", defining traditional medicine as "the total sum of knowledge, skills and practices based on theories, beliefs and experiences specific to different cultures, whether explicable or not, used for the maintenance as well as for the prevention, diagnosis, or improvement of health" and treatment of physical and mental illnesses<sup>6</sup>.

### 3.1. Pharmacognosy-ethnopharmacology

Pharmacognosy and even ethnopharmacology adopt a purely bioscientific perspective to evaluate traditional medical practices, failing to take into account broader complexities such as the plant as a living being, the practices and explanations of traditional practitioners, and other dimensions considered as not strictly medical such as the ritual.

### 3.1.1. Medicinal plants

Although 70% of allopathic medicines come from traditional knowledge on medicinal plants, the analytical process of the Western approach to this knowledge leaves out certain elements, discarded a priori, thus establishing a blind spot.

### Classification

Carl von Linné's taxonomic system of binomial botanical classification creates categories that are based on the relevance of the description of their object of study considered in isolation. However, in traditional approaches, the identification of medicinal plants takes into consideration not only their morphology and sexual characteristics, but also the growth context such as the type of terrain (clayey, rocky, etc.), the altitude and degree of humidity (for example, Lower Amazonia or Upper Amazonia),

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<sup>&</sup>lt;sup>6</sup> https://apps.who.int/iris/bitstream/handle/10665/95009/9789242506099 fre.pdf

the isolation or contact in relation to humans (the ayahuasca vine in contact with human presence loses its "strength") and even retrospectively the effects produced by their ingestion. Identical plants for a botanist may be different for a traditional practitioner, which is a source of misunderstandings between them.

#### Extracts versus totum of plants

The plant is a living being in permanent dynamics and traditional practitioners start from this evidence, while the extraction and chemical analysis processes mummify the plant. If Western science focuses on the "active ingredients" for their isolation and extraction, for traditional practitioners, plants contain a certain number of constituents that potentiate and harmonize within the totum of the plant, and it is this totum that is therapeutic as a whole and often necessary to avoid toxic or harmful side effects and thus reduce iatrogenesis.

On the other hand, the processes of extraction of active ingredients can alter the therapeutic function of plants. Thus, for example, in the galenic preparation by cryogrinding, the concentration of active ingredients is between 3 and 10 times lower than in the plant in its fresh state depending on its water content. In the method of nebulisates or dry extracts (dehydrated herbal teas using a process similar to that of instant coffee) certain volatile principles are lost during the process. Compliance with the requirements of modern manufacturing of products intended for the pharmaceutical market is generally very far from traditional requirements.

### Methods of preparation

Traditional methods of preparation or pharmaceutical recipes are often neglected in the scientific literature, even though they are likely to significantly modify the chemistry of the final product (Tresca et al., 2020; Politi et al., 2019). These recipes also include the harvesting conditions which may include, as in the Amazon, the "energetic" state of the harvester (sexual abstinence, absence of menstruation, dietary regimen, for example), the time of day (usually early in the morning), the lunar phase (often in the "rising" moon), the orientation (bark of the tree in the part of the trunk facing east), etc.

For example, some Amazonian plant preparations must be exposed to the moon's rays one night (*serenar el remedio*) to be considered more effective by traditional practitioners (Colectivo, 2008). This ethnopharmacology data, supported by empirical validation, should be considered a priori as a certain hypothesis by scientists, in order to take it into account, explore it and finally confirm or deny it. This supposes a reversal of the academic logic which tends to immediately dismiss what does not seem to fit into its schemes and then neglect their study.

This approach is part of a recent discipline, **metabolomics**, which defines a new paradigm in the field of natural product chemistry (Sumner et al., 2003). Metabolomics deals with the qualitative/quantitative identification of all metabolites present in a crude mixture. It attempts to take into account the fact that plants are living organisms and that their metabolome is constantly changing.



These processes allow to open the discussion on the similarities and differences between traditional plant preparations and modern drug preparations (Politi & Pisani, 2014).

Plants reveal every day astonishing potentialities that defy imagination and go beyond the simply molecular and even energetic field. For example, research by Anna Schouten (2023) of the University of Chicago suggests that plants, during photosynthesis, perform, at ordinary temperatures, <u>a feat of quantum mechanics</u>, a fifth state of matter known as Bose-Einstein condensed, which scientists can only obtain at ultra-cold temperatures.

### 3.1.2. Ethnology - paradigms

#### The different bodies

For Westerners there is a single body, while for traditional practitioners there is a multidimensional body or different bodies (etheric, emotional, psychic, energetic, spiritual, etc.). These various bodies are connected and associated but each have different properties and modes of functioning. The pathology can affect one or more bodies and therefore requires adapted and differentiated care. The failure of Western medicine to recognize the existence of different bodies makes the dialogue between medicines almost inaudible. Without taking these data into account in the Western approach to traditional medicine, these exchanges are doomed to a dead end.

On the other hand, the traditional practitioner engages his body(ies) in the care given to his patients and his therapeutic power or capacity will be commensurate with the degree of purification and potentiation of his different bodies (Mabit, 1988, 2020).

The mapping of these different bodies is difficult and complex due to the variety and confusion of the vocabulary used in various languages and the absence of academic and systematized presentation in most indigenous traditions.

Added to this first complexity is that of the constituent elements of the human being that are not a priori corporeal, such as the soul or the spirit, and that are also found in all traditions, although ignored by Western science. These two words cover different concepts depending on the languages and cultures. The soul is sometimes psychic (*psique* in Greek), sometimes spiritual (*noos* in Greek); the word esprit in French sometimes designates the soul (spiritual instance), sometimes the mind (psychic instance), where English distinguishes between "mind" and "spirit". The lack of clarification of this mapping of bodies on the one hand, and spiritual instances on the other, gives rise to permanent misunderstandings.

According to indigenous traditions, in sensitive creation, the various creatures are not endowed with the same bodies, it is a multidimensional reality. However, constants or invariants identified in traditional medicines are found in all latitudes:

- There is a growing differentiation in nature from minerals to human beings.
- There is a growing differentiation (vibration rate, density, etc.) of the different bodies, from the physical to the spiritual.



- All creatures are endowed with an "energetic" body, a basic structural community that allows exchanges between them. Communication between the different bodies is done through the "mediation" of the energetic body, which would be located at the interface of the different bodies. The traditional practitioner or healer equips himself with techniques to "read" the energetic body in order to make his diagnosis and, by intervening on this energetic body, he is likely to reach all the other bodies.

#### The most common confusions are:

- Confusing etheric body (electromagnetic envelope) and energetic body.
- Confusing mind, human intellect or psychic body (reflexive "consciousness") with the spiritual body (own spiritual consciousness). To put it simply, confusing mind and spirit.
- Confusing soul (non-corporeal spiritual instance) and spiritual body (spirit).

### Nature Beings

Nature beings represent a category of beings of sensitive creation linked to the elements of nature (water-earth-air-fire) and therefore often referred to as "elementals" or "nature spirits". This latter formulation is due to the fact that these beings do not have a physical body, only an etheric body and an energetic body, but it is confusing since it associates them with the entire world of "spirits".

All traditions throughout the world have recognized the existence of these beings of nature, their association with one of the elements of creation and similar characteristics. This is the case of undines and sirens (water), gnomes and elves (earth-forest), djinns and fairies (air), salamanders, volcanos (fire), etc. In the same way that animal species show their own characteristics, the different families of beings of nature have specific traits that are found almost identically in cultures extremely distant in space and time, as is the case for sirens and elves, for example.

Western tradition has also recognized their existence (Paracelsus, 1566 [1998]), but with rationalism, it tends to transfer them and confine them to the realm of the imaginary, folklore, mythology, "popular beliefs", superstition, tales and legends. Depending on the traditions and places, nature beings form entities that animate matter and protect it from all the disorders that could affect its integrity. They are, in a way, the guardian spirits of nature. They watch over the growth and good health of animals and plants. Hence the need to perform a ritual to request permission from the nature beings who are guardians of the place before entering their territory.

Their specific reduction to the etheric body alone is their only common structure with humans and therefore the one through which they will eventually communicate or interfere with them. In humans, the etheric body manifests itself somatically through the autonomic nervous system. As a result, alterations of the etheric body manifest themselves through an imbalance of the orthosympathetic/parasympathetic system which manages the automatic, unconscious functions of maintaining life (body temperature, heartbeat, digestion, breathing, etc.). It is this system that comes into play with magnetizers and dowsers. It is at this level that certain paranormal phenomena (poltergeist, for example) or sleepwalking manifest themselves.



After death, the etheric, emotional and psychic bodies can remain present for a certain time, particularly following sudden or violent deaths (suicide), when the subject does not have time to become aware of his physical death. This presence manifests itself in the form of a ghost. These ghosts wander in places that were familiar to them or in the vicinity of loved ones. In the Amazonian tradition, rituals at the time of death and in their immediate aftermath, aim to remove the disturbing presence of these deceased (difuntos) or wandering souls (almas que penan).

One of the most common maneuvers in various traditions consists of restoring the integrity of the etheric body by passing things over the patient (Giove & Mabit, 2022) using for example inert substances (alum stone, newspaper, candles), plants (chonta palm *Bactris gasipaes*, or piñón colorado leaves *Jatropha gossypifolia* L.) or animals (chicken, guinea pig, "Peruvian hairless dog") capable of absorbing these electromagnetic disturbances (Reyna Pinedo, 2002; Maniero, 2015).

Healers and sorcerers can manage to control the relationship with some of these beings, just as it is possible to tame an animal, and put them at the service of their good or evil ends.

Thus, the recognition of the ontological existence of these created beings, endowed with specificities according to their species, and their differentiation from "spirits" and ghosts, conditions a good mapping and understanding of the invisible world and the possible pathological manifestations that they can cause in humans.

Both popular imaginary and projective discourses and symbolic interpretations among scholars make their grasp by rational minds very difficult, but do not allow their existence to be excluded a priori.

### The ontological existence of spirits

The traditional notion of real good or bad spiritual entities that can impact human health characterizes traditional medicines (O'Shaughnessy, 2017; Luna, 1986; Barbira-Scazzochio, 1979). Witchcraft associated with relationships with evil spirits represents a common denominator of the "shadow" of indigenous practices throughout the world, as soon as they take refuge in "darkness and secrecy" (Whitehead & Wright, 2004). The recognition of the reality of spirits and the identification of their modes of operation, makes it possible to account for both the effectiveness of the healing function of the healer and that of the sorcerer in his evil interventions.

While in the indigenous conception the spiritual dimension transcends and covers the psychological dimension, in the modern Western world, on the contrary, the psychological dimension attempts to account for what is qualified as spiritual, by designating it as a subjective by-product of the mind or the result of neuropharmacological mechanisms. The key point of this difference is centered on the nature of spirits: metaphorical (representational) for some and real (present) for others. The ontological existence of spirits is the obstacle of this major dilemma.



## Questioning the Western denial of the existence of spirits

The manifestation of good or evil entities is generally interpreted only through a psychological, individual or collective symbolic reading grid. The symbolism invoked here is intended to be virtual, without incarnation, without objective reality. These would be simple metaphors devoid of substance. This rationalist reductionism of Western thought has infiltrated all academic disciplines, including medicine and psychology. This a priori exclusion of the reality of non-humans exempts itself from the obligation of proof.

The existence of invisible beings is recognized in anthropology only as a particular mode of cultural representations of a given society and this does not account for their universality. "If we seek to grasp the ontology of a culture or a civilization or a practice of traditional medicines, we are naturally led to seek the spiritual core that set it up." However, in this approach, Western thought is no exception to the rule: "Rationalist atheism itself, which has now become the common cultural norm of Western peoples, has its roots in a set of non-rational and in fact "para-religious" ideas and conceptions" (Plaquevent, 2023).

The resistance to the recognition of the ontological existence of spirits in the Western world would essentially stem from a perception of matter and reality as a kind of inverted pantheistic continuum, constructed during a long historical process in which the idea finally came to prevail that the **spirit** would be only a subtle and particularly elaborate stage of matter.

### Psychiatry facing the reality of minds

In the field of mental health, many psychiatrists and anthropological observers are unaware of existing indigenous health care systems, the modalities of distress expression, and the therapeutic interventions used by indigenous populations. For this reason, the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association (APA), considers and describes "culture-bound syndromes" that have emerged in specific indigenous cultures, which are the subject of much debate and criticism.

In anthropology, which until now considered this field of research as exclusive to its discipline, important changes are appearing partly due to the intervention of health professionals and the birth of ethnopsychiatry (Piero Coppo, Tobie Nathan). The lack of medical training of researchers in ethnology and anthropology does not allow them to rationally evaluate clinical observations when it comes to health. They are therefore reduced to the game of "interpretations", "representations", without ever being able to support their discourse with defensible scientific evidence and proceed by way of affirmation and not demonstration.

Ethnopsychiatry is a clinical discipline whose objective is to analyze all therapeutic systems, without exclusivity or hierarchy, whether they present themselves as "knowledge" or as practices belonging specifically to a collective. It seeks to demonstrate its hypotheses on the therapeutic devices observed in different cultural contexts, by developing methods allowing representatives of these groups to decide on their validity. It proposes a re-evaluation of traditional therapies by taking into account the meaning that patients attribute to their illness, even if they postulate "irrational" explanations



according to Western ethnocentrism. The effectiveness of these practices would not be reduced to simple "good listening" through cultural empathy, but to an ability to seek answers and solutions in the invisible domain, to identify hidden intentions and, from there, to develop real therapeutic strategies.

## Anthropology facing the reality of minds

In the field of social sciences, until recently, the development in anthropology of *etic* and *emic* approaches has attempted to fill this gap without responding on the substance or pronouncing, due to lack of competence, on the validity of clinical observations. Claude Lévi-Strauss (1962), will use a similar virtuality in structuralism with the proposal of a "symbolic efficiency" which will remain at the level of concepts without compromising on the reality of the observed facts.

Anthropology reflexively considered indigenous assertions about the spirit world as symbolic or metaphorical cultural representations, thereby invalidating the universal nature of their knowledge. Recent trends in this discipline, such as the "ontological turn" (Holbraad & Pedersen, 2017), propose to reconsider these positions born of Western anthropocentrism, both with regard to the possible ontological reality of spirits and the ritual effectiveness for entering into a relationship with non-humans (Apffel-Marglin, 2011). They have the merit of establishing a priori as true the assertions of indigenous peoples or healers about their reality.

But in the end, as with Eduardo Viveiros de Castro's "perspectivism" (2014), these are ultimately philosophical constructions that come to assume the <u>impossibility of defining ontological realities</u> or establishing a multi-ontology that is again a similar form of <u>relativism</u>. It is in a way the "doctrine of the point of view", a philosophical doctrine that maintains that all perception and ideation is subjective.

The anthropologist must dare to enter into indigenous rituals with a methodology of participatory self-observation experience, in order to evaluate from the inside the possible ontological reality of spirits and the ritual effectiveness to enter into a relationship with these non-humans.

Faced with the patent psychiatric experience of patients who affirm the tangible presence of an invisible "other" that invades them and that they describe as an incorporeal entity, endowed with intelligence and will, different theoretical models have been proposed to account for it, while denying their reality. This is the case of the concept of "active objects" by the French philosopher and sociologist Bruno Latour (1994); of the affirmation by the Belgian philosopher Isabelle Stengers (2012) that "the unconscious is a mysterious and dominant object" and that spirits, demons, etc., exist, but only as a category of "cultural invisibles"; or the proposals of psychoanalysts Nicolas Abraham and Maria Torok (2006), who speculate on the possibility of the presence of a "ghost, present within an individual, escaping from a family crypt", but ultimately reduced to "a creation of the unconscious". These various conceptual artifices and intellectual contortions seem intended only to better deny the reality of spirits, a hypothesis that greatly bothers Western rationalist ethnocentrism and leads it to para-religious, even magico-religious, forms of thought.



#### **Conclusion**

Science must accept knowing how to let itself be surprised in this domain of the "invisible" and to get out of the dogmatic position or posture which consists a priori in excluding the possibility of an "objective", "ontological", "natural" existence of certain invisibles. To dismiss this hypothesis from the outset, by pure ideology, does not allow it to be taken into account and possibly verified.

Why can the sensible world be objective, endowed with natural data, and the insensible world could not?

Active objects, cultural invisibles, psychic ghosts: these speculative conceptual artifices fundamentally lack a confrontation with the clinic, and maintain the limitations of the ideology of Western science locked in its "modern" cultural denial of the spiritual dimension and its universality. As a result, they obstruct access to the establishment of a fruitful dialogue with traditional medicines.

The limitations of Western science, when it comes to approaching traditional medicines, invite us to move towards a post-materialist paradigm proposed by certain scientists in neuroscience (Mario Beauregard, 1995)<sup>7</sup>, to move away from closed and self-referential tautologies, and to open up to a theory of complexity to approach reality, such as that proposed by the philosopher Edgard Morin (1995).

<sup>&</sup>lt;sup>7</sup> https://opensciences.org/files/pdfs/Manifesto-for-a-Post-Materialist-Science.pdf



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#### REFERENCES

Abraham N., Torok M., (2006) Symboles, cryptes et fantômes, Fournitures diverses, Éditeur ERES.

Apffel-Marglin F. (2011) Subversive Spiritualities: How Rituals Enact the World, Oxford University Press, pp. 255.

Barbira-Scazzochio, F. (1979). Etnicidad y Fronteras en los Quechuas de la Selva Peruana, University of Cambridge, Centre of Latin American Studies, Cambridge, pp. 257.

Berlowitz, I., Ghasarian, C., Walt, H., Mendive, F., Alvarado, V. & Martin-Soelch, C. (2018). Conceptions and practices of an integrative treatment for substance use disorders involving Amazonian medicine: Traditional healers' perspectives. Revista Brasileira de Psiquiatria 40 (2): 200-209. doi: 10.1590/1516-4446-2016-2117

Berlowitz, I., Walt, H., Ghasarian, C., Mendive, F., & Martin-Soelch, C. (2019). Short-Term Treatment Effects of a Substance Use Disorder Therapy Involving Traditional Amazonian Medicine. Journal of Psychoactive Drugs 1–12. doi:10.1080/02791072.2019.1607956

Berlowitz, I., Walt, H., Ghasarian, C., O'Shaughnessy, D.M., Mabit, J., Rush, B., & Martin-Soelch, C. (2020). Who Turns to Amazonian Medicine for Treatment of Substance Use Disorder? Patient Characteristics at the Takiwasi Addiction Treatment Center. Journal of Studies on Alcohol and Drugs 81 (4): 416-425. doi:10.15288/jsad.2020.81.416

Bopp, M., & Bopp, J. (2011). The Esketemc (Alkali Lake) community story: a case study. Calgary, Canada: Four Worlds Centre for Development Learning, Four Worlds Press.

Chiappe, M. (1968). Técnica del tratamiento curanderil del alcoholismo. Anales del V Congreso Latinoamericano de Psiquiatría. Colombia.

Chiappe, M. (1976). El empleo de alucinógenos en la psiquiatría folklórica. Boletín de la OPS, 81 (2), 176-186.

Colectivo (2008) La vida secreta de las plantas medicinales en los pueblos Kichwa, Kukama-Kukamiria y Tikuna Una aproximación al conocimiento de algunas plantas de uso medicinal en la Comunidad Educativa de Zungarococha Iquitos, Programa de Formación de Maestros Bilingües de la Amazonía Peruana, Asociación Interétnica de Desarrollo de la Selva Peruana, Instituto Superior Pedagógico Público "Loreto", Iquitos, 2008.

Denys, A. (2013). Des plantes médicinales au service d'une action thérapeutique dans la prise en charge de l'addiction. Ethnopharmacologia 50: 69-78.

Giovannetti, C., Garcia Arce, S., Rush, B., & Mendive, F. (2020). Pilot Evaluation of a Residential Drug Addiction Treatment Combining Traditional Amazonian Medicine, Ayahuasca and Psychotherapy on Depression and Anxiety. Journal of Psychoactive Drugs 1–10.

Giove, R. (1996). Medicina Tradicional Amazónica en el tratamiento del abuso de drogas: Experiencia de dos años y medio (92-94). CEDRO, Lima, 135p.



Giove, R. (2002). La liana de los muertos al rescate de la vida, medicina tradicional amazónica en el tratamiento de las toxicomanías. Tarapoto, Perú: Takiwasi.

Giove R., Mabit J. (2022). Percepción y tratamiento del susto por madres de familia de la ciudad de Tarapoto, RPA Revista Peruana de Antropología Vol. 7, N° 11, pp. 32-50.

Holbraad, M., Pedersen, M.A. (2017). The Ontological Turn: An Anthropological Exposition. Cambridge: Cambridge University Press, 352 pp.

Latour B. (1994). Une sociologie sans objet? Remarques sur l'interobjectivité, Sociologie du travail, Elvisier.

Lévi-Strauss C. (1962) La Pensée sauvage, Plon.

Luna, L.E. (1986). Vegetalismo: Shamanism Among the Mestizo Population of the Peruvian Amazon. Stockholm: Almqvist & Wiksell International.

Mabit, J. (2007) Ayahuasca in the treatment of Addictions, In Psychedelic Medicine (Vol. 2): New Evidence for Hallucinogenic Substances as Treatments, eds. Thomas B. Robert and Michael J. Winkelman, pp. 87-103. USA: Praeger Ed.

Mabit J. (1988) "El cuerpo como instrumento de la iniciación shamánica en la Alta-Amazonía Peruana", Anales del II Congreso Internacional de Medicinas Tradicionales, Lima, Perú, Julio 1988. Réédité: Mabit, J. (2021). Plantas medicina y clínica terapéutica. Editorial Libros Enteogenicos, Rosario, Argentina.

Mabit J. (2009) "Ayahuasca: memoria y conciencia, nuevas aplicaciones de una práctica indígena ancestral". Conférence inaugurale pour el 25ème anniversaire de la Society of Anthropology of Counsciousness, 15.04.2005, University of Massachussetts, USA., in Psiquiatría y Salud Mental, año XXVI, n°3-4, Julio-Diciembre 2009, pp.172-189, Santiago, Chile.

Mabit J., & González J. (2013). Hacia una medicina transcultural. Reflexiones y propuestas a partir de la experiencia en Takiwasi. Journal of Transpersonal Research 5 (2): 49-76. Traduction en français « Vers une médecine transculturelle. Réflexions et propositions fondées sur l'expérience du Centre Takiwasi" https://www.takiwasi.com/docs/arti fra/vers-medecine-transculturelle.pdf

Mabit J. (2018). Apports thérapeutiques de l'Ayahuasca dans le cas d'addictions, In "Histoires et usages des plantes psychotropes" ed. Sébastien Baud, éditions IMAGO, 2018, pp.267-286.

Maneiro E. (2015) El perro sin pelo del Perú, una herencia milenaria. Edición bilingüe, Librería Cultura Peruana, pp 224.

Morin Edgar, 1995, Penser la complexité in Sciences humaines, n° 47, février 1995.

O'Shaughnessy, D.M. (2017). Takiwasi: Addiction Treatment in the "Singing House". PhD thesis, James Cook University, p. 286.

O'Shaughnessy, D.M., Berlowitz, I., Rodd, R., Sarnyai, Z., & Quirk, F. (2021). Within-treatment changes in a novel addiction treatment program using traditional Amazonian medicine. Therapeutic Advances in Psychopharmacology 11: 1-18. doi:10.1177/2045125320986634



Paracelse (1566 [1998]), Le Livre des nymphes, sylphes, pygmées, salamandres et de tous les autres esprits, trad. Sylvie Paris, Nîmes, Lacour-Ollé, 1998. L'édition Huser est intégralement consultable sur la base de données THEO, établie par Urs Leo Gantenbein (directement accessible sur www.paracelsus-project.org).

Plaquevent P.A. (2023) L'orientation spirituelle contemporaine de l'Occident. http://www.pierreantoineplaquevent.fr/2022/06/02/lorientation-spirituelle-contemporaine-de-loccident-pierre-antoine-plaquevent/

Politi, M., Friso, F. and Mabit, J. (2019). Plant based assisted therapy for the treatment of substance abuse disorder – Part 2. Beyond blurred boundaries, Revista Cultura y Droga 24 (28), 19-42.

Politi M. and Lelia Pisani (2014) Traditional pharmaceutical recipes from a metabolomics perspective: Interviews with traditional healers in Mali and comparison with modern herbal medicines, Advancement in Medicinal Plant Research Vol. 2(1), pp. 1-6, January 2014.

Politi M., Giorgia Tresca, Marco Soffiato, Richer Garay Montes, Fernando Mendive (2019) Phytochemical profiling of Amazonian herbal medicinal products: The role of traditional processing methods Journal of Medicinal Herbs and Ethnomedicine 2019, 5: 1-7 doi: 10.25081/jmhe.2019.v5.3832 https://updatepublishing.com/journal/index.php/jmhe/

Reyna Pinedo, V. (2002) La soba o limpia con cuy en la medicina tradicional peruana. Laika Comunicaciones Ed., 116 p.

Rush, B., Marcus, O., Garcia, S., Loizaga-Velder, A., Loewinger, G., Spitalier, A. & Mendive, F. (2021). Protocol for Outcome Evaluation of Ayahuasca-Assisted Addiction Treatment: The Case of Takiwasi Center. Frontiers in Pharmacology. doi: 10.3389/fphar.2021.659644

Schouten, Anna & Sager, Leeann & Mazziotti, David. (2023). Exciton-Condensate-Like Amplification of Energy Transport in Light Harvesting. PRX Energy. 2. 10.1103/PRXEnergy.2.023002.

Stengers I., Nathan T. (2012), Médecins et sorciers. Paris, Ed. La Découverte, 230 p.

Sumner LW, Mendes P, Dixon RA, (2003) Plant metabolonmics: largescale phytochemistry in the functional genomics era. Phytochemistry, 62(6):817-836.

Tresca G., Olivia Marcus & Matteo Politi (2020) Evaluating herbal medicine preparation from a traditional perspective: insights from an ethnopharmaceutical survey in the Peruvian Amazon, Anthropology & Medicine, 27:3, 268-284, DOI: 10.1080/13648470.2019.1669939

Viveiros de Castro E. (2014) Perspectivisme et multinaturalisme en Amérique indigène, Journal des anthropologues 2014/3-4 (n° 138-139), pp. 161-181.

Whitehead N., Wright R. (2004). In Darkness and Secrecy. The Anthropology of Assault Sorcery and Witchcraft in Amazonia. Durham: Duke University Press.

