4.1.6 Ethnoecology as a Tool for the Memory Construction, Integrity of Knowledge and Local Sustainable Development in the Vaupés Department (Colombia), Northeast of the Colombian Amazon Beltrán Zapata, G. D.; Castro Pineda, N. A.

#### Abstract

Medicinal plants have played an important role in the management and treatment of disease since the beginning of human existence. In this sense, indigenous cultures have acquired a broad knowledge of traditional medicine by their constant interaction with the environment, healing diseases over thousands of years. The Vaupés department is very diverse, biologically and culturally; approximately 85% of the population is indigenous. Unfortunately, throughout history, different processes have led to an acculturation of indigenous communities in this area, resulting in the loss of knowledge and of the original practices of traditional medicine, including ancient transfer models. Currently, traditional healers in the Vaupés (and Colombia in general) see the need to transmit their knowledge to future generations, to strengthen the transfer systems, to rejuvenate their identity, as well as to integrate them into models of local sustainable development. We would like to contribute to this process of memory recovery and knowledge revival.

**Keywords:** traditional medicine, Vaupés – Colombia, ethnoecology, memory, local sustainable development

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#### Introduction

Colombia has broad natural, cultural and epistemological diversity. The biological diversity of the country represents 10% of the planet's (Hernández, 1993). This is the result of its location in the tropics, along with a variable topography and watershed areas that constitute drainage areas and fertile soils that are optimal for agricultural and biological distribution. Its variety of landscapes and diverse ecosystems make Colombia a gene bank of wild and domesticated organisms and cultures.

The Vaupés, located in the northeast of the Colombian Amazon, is one of the most culturally-diverse regions in Colombia. By Act 2 of 1959, the entire department was established as a forest reserve of the Colombian Amazon. It is also considered a *Gran Resguardo Indígena* with 85% indigenous population. The remaining 15% are white, mestizos and blacks (Perdomo 2004). This territory includes 32 ethnic groups (Da Cruz, 2007) who speak 18 languages in total. The Vaupés is a conserved and isolated area, rich in knowledge, world views, beliefs and traditions that have been acquired by indigenous communities over many generations. They have their own sense of bio-cultural conservation and protection.

The purpose of this article is to establish a philosophical and epistemological basis for implementing of ethno-ecological research supporting local sustainable development and common welfare, highlighting the importance of memory and the recovery of knowledge. Our methodology was based on participant observation, interviews with traditional

healers, fieldwork and assistance in various practices related to traditional medicine (*medicina ancestral*).

### Historical Issues

Since the beginning of the free market, large-scale demand for minerals and aquaculture resources, extensive farming, mega-projects, patenting seeds and gene banks, among others, have become part of the business process and of the models for global development (Fajardo, 2011). Consequently, societies have undergone changes in perception caused by the dominant idea of "modern life", linked to the exploitation of nature.

The Vaupés is a department in which the state is largely absent, due to its geographical position; it has no ground infrastructure connecting it to the center of the country; its waterways have numerous rapids and falls, making the passage of large vessels impossible. Its ancient soils originated in the Guiana Shield, have few nutrients, and allow low levels of food production, causing vulnerability in the population's food security, nutrition and health, in a time of vanishing cultural practices and knowledge regarding wild rain forest resources.

The different processes of conquest, colonization, evangelization and extractivism that swept over this region since the 16th century have generated the loss of traditional medicinal knowledge, including knowledge about biological resources such as yagé [Banisteriopsis caapi (Spr. Ex Griesb.) Morton], about building traditional housing and ceremonial infrastructure such as the maloca, and about the role of payé or shaman as backbone of traditional medicine and ancient social organization. European cultures considered these traditions and characters as the product of "evil". Consequently, numerous indigenous people were murdered, enslaved and evangelized. The decrease of the pre-Columbian population and the magnitude of loss of ancestral ecological knowledge remain unknown.

Though some key elements of local traditional medicine were lost, other processes, such as the migration of slaves or settlers, prompted an exchange of wisdom with indigenous people. The wisdom comes from different cultures and it increased mixed peasant-indigenous ethnobotanical knowledge for the curing of exogenous diseases such as influenzas, sexually transmitted diseases, pains, etc. Culture turns out to be a dynamic process in which the intercultural operates as an engine for both the generation and loss of knowledge and practices driven by different historical pressures.

Currently, the western health system dominates the traditional one. Unfortunately, in such a vast, untouched territory without roads or services, the conventional health system in the Vaupés presents numerous difficulties (Clavijo, 2011): 1) difficult access to geographic locations distant from health centers; 2) the population lacks economic resources to pay for health services; 3) lack of efficient and appropriate treatments; 4) lack of specialized medical training, especially in the field of tropical medicine, preventive health care and public health; 5) insufficiencies in the knowledge of health care providers; 6) irregularity in the services provided in communities and remote locations; 7) insufficiency and poor management of transportation systems, etc. It is here where the revitalization, strengthening and appropriation of traditional medicine play an important role in addressing medical issues and in recovering cultural identity and significance.

## Memory: Traditional Medicine in the Vaupés

Traditional medicine has its technology and history. Myths and stories about the creation of healing originated in the everyday community life and social structures. Healing with plants and prayers, as well as the roles and functions of different protagonists, play a key role in indigenous medicine and social organization (Fig. 26). After living together (including our one-year old daughter Juana Isabella) for a year with the indigenous people of the Vaupés and establishing relations of friendship and trust with the healers of the Macaquiño community, it was possible to record a narrative that sums up the traditional medicine,

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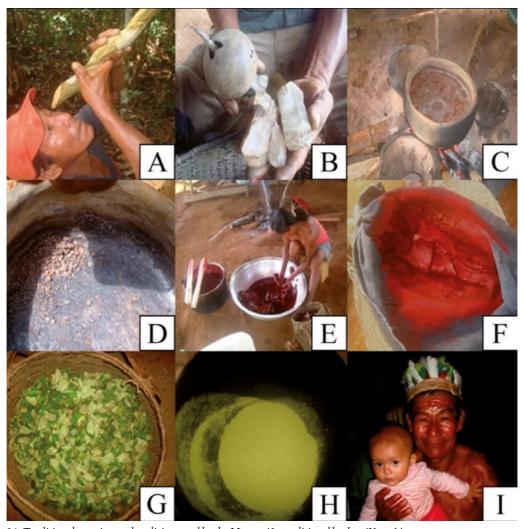
customs and ancestral social organizations in the Vaupés [source: Rafael Fernández, traditional healer, 75 years old with the vital energy of a 20-year-old man, (Fig. 26)]:

"In the past, the indigenous population of the Amazon lived in a maloca where they shared food and the fermented beverage 'chicha' to learn the family tradition. In the middle of the family there were the paye and the healer, who were the most influential people within the maloca. There was also a dancer (danzador), a carrizódromo (musician), and spiritual leader (rezador) who protected the lands and families. The payé taught and healed sick people. Young people who followed his lessons had to comply with the rules he made. The course would have between five and ten people. These students stayed with the payé fulfilling diets and orders. Later they continued with other more profound courses. The healer was the one who taught traditional medicine; patients were sent to him by the payé, who discovered the origin of disease. The healer prescribes which plant should be taken by the patient and the dosage. The danzador is an enthusiastic character who also gives lessons to participants. This course requires diets, punctuality, waking up early and restricted food. Also much respect, and the ability to withstand the yage and sexual abstinence. The carrizodromo is a friend of all the children and young people. Anyone can visit him and ask questions to learn about the carrizo.<sup>24</sup> He does not require many diets, only a willingness to learn and to be responsible for completing tasks that have been already set. The religious leader (rezador) is another very important person within the family and the maloca. The good development of children, a good atmosphere in the community, success in fishing and hunting, depends on him; if he is in a good mood, there is an abundance of food, if not there will be shortages. The knowledge of our grandparents was transmitted in the center of the maloca, once a young man has passed the Yurupary ceremony (the history of the origin, culture, social organization and transition to adulthood in northwestern Colombian Amazonia). When the period of diets begins, he bathe early in the morning, inhales chili, avoids eating smoked food, frightening noise and contact with menstruating women. When theses rules are followed, the knowledge is transmitted to the young people, and they can become healers, or prayers, and practise healing methods (payelogía), dances, or herbal medicine. Dosages and diets are the same as those practiced for the funeral ceremony of Mavichicury. An evil was created in the form of a poison to kill humanity without exception, but fortunately, the remedies were also created. Yavina, the younger brother of Mavichicury, died from poisoning by the specialist of poisons called Tepatete, creator of evil and death.<sup>25</sup> Yavina created and introduced all remedies from wild plants and plants planted around the house, he created an antidote, an antivenom against snake bite, medicine against headaches and other pains. He also taught how to fight against evil, and how to avoid bad spirits, tigers and other spirits. He taught us how to pray for childbirth, so the children will develop normally; for food, to keep us healthy and have good teeth. This is why in the Vaupés we pray for all those who are born. It is a kind of vaccine. Otherwise, we would suffer from fever, headache and dental pain. Nowadays we still have drugs and some prayers. We hardly use antidotes, because venom is currently decreasing. The jungle is very nice, beloved by its owners, such as spirits, tigers, mosquitos, chameleons and many more. They produce evil for the human beings of the Vaupés. If it comes from another place, it could be that it does not do any harm to the person, but eventually something will happen. That is why Yavina left us a remedy and a prayer. The prayer has to contain a serious invocation regarding the person we pray for."

Memory as a cultural claim allows to legitimize forms of decolonization of being and historical knowledge (Quijano, 2007). It is necessary to recognize and relearn the history of Native American cultures in order to reclaim their past, present and future. This is where education plays a fundamental role for the family, for the society, both local and global. It is the engine of cultural tradition, and each culture contains different models of knowledge transfer. Memory also has to be a strategy for strengthening social organizations and territorial defense.

<sup>24</sup> Carrizo is an indigenous wind instrument used in traditional ceremonies and dances (A/N).

<sup>25</sup> For further reading on religious thought of Vaupés Amazonian societies, see Goldman (2013) (Ed.).



26: Traditional practices and medicines used by the Macaquiño traditional healers (Vaupés)

- A. Bejuco estrella (Aristolochia trilobata I (A. Durior)) used for cleaning eyes by healer Raúl Fernández, 68 years old.
- B. Quartz and special maracas used in the past by the payés for the detection and cure of diseases.
- C. Preparation of Virola theiodora, a potent psychoactive.
- D. V. theiodora powder.
- E. Preparation of Carayurú (Arrabidaea chica) used for self-protection and body painting.
- F. Carayurú paste ready to be used.
- G. Leaf of Erythroxylon coca var. ipadu.
- H. Mambe: Erythroxylon coca var. ipadu powder.
- I. Intercultural relationship, healing and knowledge transfer (Right: Traditional healer Rafael Fernández; left: Juana Isabela Beltrán Castro from Bogotá DC).

Source: Author's Archive

### Ethnoecology as a Tool for the Memory Revival

According to Da Cruz (2007), ethnoecology is a science that comprises "the interdisciplinary study of how nature is perceived by a particular group of people through a set of beliefs and knowledge, and how through these images such human groups use and manage their local natural resources". Ethnoecology includes subdisciplines such as ethnobiology, ethnobotany, ethnozoology, ethnoentomology (Toledo, 1990), and more recent agroecology (Toledo & Barrera-Bassols, 2008). Ethnobotany is the part of ethnoecology concerning plants (Martin, 1995).

Local communities have a wealth of traditional knowledge (Alexiades, 1999); these include beliefs, traditions, and customs, as well as social aspects of modes of living, models of knowledge transfer, and social or community organizations, which are necessary for the survival of the people. In addition, they are key elements of their identity, autonomy and well-being. For many years, these values have contributed to the conservation of our landscapes, and drainage areas, and to extensive gene banks, as well as healthy food, and traditional medicine, which are essential for health and food security. Much knowledge and many practices have provided useful tools for the development of modern knowledge. Science should understand and recognize indigenous science. Modern ethnobotany allows an interconnection between the modern and rural and indigenous science, as well as the interaction of culture with local sustainable development.

## Integrity of Knowledge? Intercultural Dialogues

The "knowledge dialogue" turns out to be an important intercultural tool (Zuluaga, 2006; Acosta *et al.*, 2007; Toledo, 2009; Pérez & Argueta, 2011) that allows people to get to know each other as human beings. In addition, it establishes a network of understanding, comprehension and interpretation of life, cosmology and socio-cultural changes in the world around us; to reflect and become conscious, discover needs, problems, strengths and solutions in everyday life. Thus, it generates alternatives and decisions which are projected into a common welfare in harmony with nature. In this way, the knowledge dialogue represents an intercultural, interethnic, and interdisciplinary core, as well as interinstitutional framework, which allows greater effectiveness in construction processes, as it takes into account memory as the basis of epistemological and cosmogonic freedom.

In this way, memory is imbued with the history of the earth and of organisms, and allows us to understand who we are, where we come from, what ecological role we fulfill and where we are going. In order to make appropriate decisions on the local and regional levels regarding different environmental, socio-cultural, economic and political aspects, the knowledge dialogues turn out to be an essential tool for reflection, awareness and coordination. Through memory and knowledge dialogue we rise to new global adaptations allowing a harmonic evolution and preservation of the human species and biota (Toledo, 2009). This is how the importance of knowledge dialogues as a tissue of local sustainable development is being highlighted.

# From Local Sustainable Development to Well-being

Local sustainable development must be constituted through the knowledge dialogue and memory construction, as well as planning strategies that subtract the immediate social needs in sovereignty, food security, health, sanitation and well-being (Hourtart, 2010; Gudynas, 2011). Encouraging local development helps magnify the global development; it is the beginning of separating us from the dominant modern system that is situated in systemic crisis (Hourtart, 2010) and of guiding us toward integral local autonomous systems with multidimensional and sustainable ecological projections. Arguably, if there are efficient and sustainable local economies/exchanges, the global economy/exchange may be optimal and permanent.

Local sustainable development is an integral and holistic way, which aims at meeting the following objectives: 1) the protection, restoration, and conservation of landscapes, knowledge, transfer models, and traditional practices; 2) the proper management, use, and utilization of genetic resources, soils, and watersheds to establish a balance between territory-society; 3) strengthening social aspects such as education, health, social/community organization, interculturally, policy, as well as the economy, favoring the common good over that of individuals; 4) the proper investigation of life and territory within an integral context; 5) the conceptual and methodological advancement of knowledge by technological tools; 6) the creation and strengthening of economic and political models for local sustainable development. Moreover, objectives also include prioritizing use value over exchange value, and consolidating life plans and policies that allow welfare, authenticity and autonomy of communities and improve their well-being.

We conclude this contribution with a phrase that can guide us to well-being: "Without nature, there is no culture, without culture, there is no society, and without society, there is no sustainable development or well-being." This is the reason the revival of bio-socio-cultural memory of local communities plays a fundamental role in holistic learning about our past and present, and in adaptation to a self-sufficient and sustainable future.

### **Summary**

Ethnoecology is the science that integrates various aspects of reality in different periods, world views and life projections. In the context of the Vaupés, ethnoecology is sought to be an innovative strategy for the revival of historical, biocultural and collective memory of the indigenous people. It integrates the knowledge of modern and traditional science, in order to achieve the self-sufficient and local sustainable development and well-being of indigenous communities and society in general. In addition, ethnoecology establishes a harmony of different natural, cultural, social, political, economic, and psychological dimensions by new strategies for strengthening the traditional knowledge and innovation of indigenous/modern science.

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