Case Study

The spiritual geography of landscape

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Abstract: A majority of the scholarship on landscape views the domain through cultural and natural lenses. This paper adds a third dimension to landscape that is spiritual. According to Indigenous animist ontology, the "sacred" space between being, place, language, and landscape is integral to the way humans perceive, value, interact, and manage their environments. An historical ecological approach (Balée, 2006) defines landscape as co-evolutionary, the product of dialectic exchanges between natural and cultural forces, yet its model remains anthropocentric. Others embrace a more holistic approach to landscape by using terms such as "biocultural diversity" (Maffi, 2001), a reification of the nature-culture binary. Despite limited scope, these approaches represent important frameworks for integrating a third agent of influence within landscape. The field of spiritual ecology (Sponsel, 2012) provides evidence of the importance of supernatural perspectives in understanding how landscapes transform through time; however, this body of literature is based on the political view of an environmental crisis, and a call for spiritual revolution. A spiritual geographical approach does not impose value judgments, nor does it call for a radical shift, but rather it serves as a research program concerned with the participatory recollection, transfer, documentation (written, audio, video, and digital), and analysis of spiritual knowledge and practice in landscape. This approach is especially applicable to Indigenous worldviews where mappings serve as important evidence of intellectual property and ancestral ties to land and resources. After a review of landscape within historical, spiritual, and political ecologies, a case study focuses on Akawaio spiritual geography. A brief discussion of participatory approaches and their risks precedes concluding remarks. Primary qualitative data comes from oral traditions and sacred sites documented during multi-sited ethno-geographic fieldwork between 2011 and 2013 in the circum-Mount Roraima landscape (Cooper, 2015) of the Guiana Highlands in Northern South America.

Keywords: Indigenous knowledge, historical ecology, spiritual ecology, political ecology, landscape

1. Introduction

An increasing number of scholars use the term "spiritual geography" to describe the relationship between place and religious or spiritual beliefs and practices. Two books from the early 1990s use the term in their subtitles: *Beliefs and Holy Places: A Spiritual Geography of the Pimeria Alta* (Griffith, 1992) and *Dakota: A Spiritual Geography* (Norris, 1993). Martha Henderson was compelled by these titles to write an article in 1993 entitled "What is spiritual geography?" She compares and contrasts each book and briefly refers to other literature that engages with certain aspects of place, the human-environment relationship, and spiritual ontology, but stops short of clearly outlining the field. She concludes that humans have a need and unique ability to "legitimize the unknown through the construct of place. Place becomes the text of what it means to be human. Geographers should not be hesitant to recognize place as a medium to understand human spirituality" (Henderson, 1993, p. 472). This paper expands Henderson's concept of place in order to establish an approach to understanding the spiritual geography of landscape.

Additional publications that use the term "spiritual geography" in their title include: "A Choreography of the Universe: The Afro-Brazilian Candomble as a Microcosm of Yoruba Spiritual Geography" (Walker, 1991); "Spiritual Geography and Political Legitimacy in the Eastern Steppe"

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(Allsen, 1996); Believing in Place: A Spiritual Geography of the Great Basin (Francaviglia, 2003); "Jesus and the Undocumented Immigrant: A Spiritual Geography of a Crucified People" (Groody, 2009); and Heretic Blood: The Spiritual Geography of Thomas Merton (Higgins, 2016). The diversity and proliferation of literature on spiritual geography is evidence of the salience of this relationship.

The geography of religion, a sub-discipline of cultural geography, has a long and distinguished history (see Kong, 1990, 1993). As recognized by Foucault, religion is a crucial component of every society, even those considered "secular" (Holloway & Valins, 2002). Placing religion *and* spirituality in geography enables nuanced understanding of diverse conceptual systems including animism (Harvey, 2013). It also enriches spiritual ecology (Sponsel, 2001, 2012), historical ecology (Balée, 1998; Rival, 2006), and political ecology (Watts & Peet, 2004) with an additional frame of reference.

2. An historical ecology of landscape

The word "landscape" has been used in various ways in different disciplines. Art historians trace the origin of the genre to the first half of the fifteenth century when painters began to portray an interior "Flemish window" that frames distant landscapes (Descola, 2013). In contrast, landscape for ecologists incorporates the physical and biotic components of an area and their inter-relationships (Wu, 2006). However, landscape ecologists do not generally acknowledge the spiritual ecology of landscape that, according to many Indigenous communities and scholars (Grim 2001; Sponsel, 2001, 2012; Swimme & Tucker 2011; White, 1967), is integral to its composition and morphology.

Ethno-ecologists focus on the perception, interaction, and classification of landscape (Johnson & Hunn, 2010). Most are not concerned with spiritual and cosmological dimensions, with a few exceptions. For example, anthropologist Thomas Thornton (2011) uses a conceptual model that emphasizes four critical processes of landscape cognition: perception, affordance, practice, and biospiritual forces. He argues that for the Tlingit:

Biospiritual aspects of landscapes often derive from mythic time, when the world was formed or shaped by Raven and other metaphysical agents. These aspects remain strong by virtue of the fact that ancestral spirits continue to dwell on the land. (Thornton 2011, p. 284)

Thornton's work provides a model for enlarging the scope of landscape to include mythological and metaphysical agents/biospiritual forces/other-than-human persons (see Hallowell, 2002 [1960]; Viveiros de Castro, 1998, 2004).

Landscape for geographers encompasses spatial relationships among physical, biotic, and human elements. This approach is akin to that of landscape ecologists, although geographical research is generally more concerned with toponymy, the recognition and naming of specific places (Johnson & Hunn, 2010). Carl Sauer (1925, 1963) is widely credited with developing a theory of landscape that integrates physical and cultural dimensions. His work focuses on the material basis of cultural life, especially agriculture and the domestication of plants and animals. *The Morphology of Landscape* (Sauer, 1925) offered American geographers a window on developments in European, especially German (Hettner, 1927), geographic thought regarding the concept of not only landscape, but also culture and chorology (Mathewson & Kenzer, 2003). He challenged environmental determinism and is largely responsible for discrediting the environmentalist project within American geography (Denevan & Mathewson, 2009). One of his students, Yi-Fu Tuan (1977, 1979, 1990), developed landscape theory further, elaborating the concept of topophilia (human love and emotion toward place) as a critical component of human geography, especially among Indigenous peoples (Johnson & Hunn, 2010).

Sauer was a strong advocate for rural and Indigenous populations. He was outspoken about the rights of these communities to defend and extend traditional ties to the land in the face of development and modernization (Denevan & Mathewson, 2009). Sauer established the discipline of geography on a phenomenological and dialogical basis, rather than being simply concerned with the environment's impact on culture or vice versa: "The task of geography is conceived as the establishment of a critical system which embraces the phenomenology of landscape, in order to grasp in all of its meaning and colour the varied terrestrial scene" (Sauer, 1925, p. 25). Recent interest in bridging the philosophical tradition of phenomenology (Heidegger, 1927; Merleau-Ponty, 1945) with

ecological issues (Abram, 2007, 2010; Griffiths, 2006) has brought renewed interest to the field of Indigenous ontology, particularly within the context of overpopulation, environmental degradation, and climate change (Hinzman et al., 2005; Green & Raygorodetsky, 2010). Sauer wrote:

I can define human geography as the natural history of mankind, as an historical ecology centering about the skill or lack of foresight with which he has made use of the materials at hand. This is a field that properly belongs to the geographer. (Sauer to L. S. Wilson, April 6, 1948 as cited in Denevan & Mathewson, 2009, p. 240)

Fifty years later, various anthropologists established historical ecology (Balée, 1998, 2006; Balée & Erickson, 2006; Rival, 2006) with a focus on human physical modification of land through the building of canals and levees for agricultural production, soil enhancement (*Terra Preta do Índio, Terra Preta*, Indian Black Earth, Amazonian Dark Earth [ADE], Black Earth, biochar, etc.), and the selective cultivation of cultural forests (Balée, 2013) previously known as "wilderness areas" or "forest islands." Much like a morphed palimpsest, this approach builds on Sauer's theory of landscape morphology, focusing on coevolution and the human capacity to not only degrade, but also enhance landscapes over the *longue durée*.

Laura Rival (2006) clarifies the role of landscape in historical ecology: "As defined by historical ecologists, 'landscape' becomes a bridge between a whole range of disciplines and sub-disciplines pertaining to both the natural sciences and the humanities" (p. 90). Following this logic, landscape represents a viable bridge to integrate spiritual interpretations with natural and cultural tropes.

An extensive body of literature on being, place, space, language, and landscape (Balée, 1998, 2013; Basso ,1996; Casey, 1996; Sauer, 1925, 1963) emphasizes the cultural meaning and construction of place. This research falls between cultural landscape approaches and environmentally deterministic models (Diamond, 1997; Meggers, 1996 [1971]) by focusing on a third dimension of landscape that is biospiritual (Thornton, 2011), functioning as an interlocutor between traditional anthropological and eco-centric modalities. The following diagram expresses this relationship:



Figure 1. Dimensions of spirit, nature, and culture

There are two fundamental reasons for including the spiritual dimension in landscape: 1) within Indigenous animist communities, spiritual beings and ontologies situated in place play a central role in maintaining social and environmental ethics; and 2) religious and spiritual ontologies are often the primary source of worldviews, values, attitudes, motivations, and lifestyles that profoundly affect how people interact and engage with their environment. According to a recent demographic study of more than 230 countries and territories, there are 5.8 billion religiously or spiritually affiliated adults and children around the globe representing 84 percent of the 2010 world population of 6.9 billion (Stonawski, Skirbekk, & Potančoková, 2015).

The next section explores the field of spiritual ecology in order to add a third dimension to the existing nature-culture ontological continuum (Descola, 2013, p. 79) and biocultural integrity (Maffi,

2001) creating a reimagined sacred trinity of nature, culture, and spirit as distinct interpenetrating dimensions of landscape.

3. A spiritual ecology of landscape

In China, a mixture of astrology, topography, landscape architecture, and Taoist mythology inform the concept of *feng shui* (風水: wind and water) that relates to the energy of the land (Paton, 2014); *chi*, *qi*, *or ch'i* (氣) is a life force or energy flow that permeates landscape; *yin-yang* (陰陽: male and female principle) describes how seemingly contrary forces may actually be complementary, interconnected, and interdependent in the natural world. In Polynesia, the concept of *mana* relates to a "supernatural" or "spiritual power" that flows through land and its myriad beings (see Codrington, 1891; Keesing, 1984). The Akawaio and Alleluia of the Guiana Highlands of South America speak of *akwa*, a radiant light energy that animates landscape (Cooper, 2015). Academics turn to sacred geography (Eck, 1998; Lane, 2002) or spiritual ecology (Grim, 2001; Sponsel, 2001, 2012; Swimme & Tucker, 2011; White, 1967) to understand these phenomena.

Spiritual ecologists believe that the proliferation of religious identities and increased stress being applied to Earth's resources demand a thorough evaluation of the interface between spirituality and environmentalism. They believe that in order to overcome the current ecological challenges, humans require spiritual development, not economic development. In *Spiritual Ecology: A Quiet Revolution*, Leslie Sponsel (2012) argues that spiritual ecology parallels other approaches to human-environment interaction like historical ecology and political ecology.

From a linguistic point of view, the global population belongs to between 5,000 and 7,000 cultures (Brenzinger, 2007). It is estimated that between 4,000 and 5,000 of these belong to Indigenous peoples. Thus, these peoples represent as much as between 80 to 90 percent of the world's linguistic and cultural diversity. Areas with the highest concentrations of linguistic and cultural variance, often in forested areas, also tend to have high rates of biocultural diversity (Maffi, 2001).

For animist individuals, every act of appropriation of nature must be negotiated with all existing things (alive and non-living) through different mechanisms such as agricultural rituals and acts of shamanic and symbolic exchange. John Grim (2001) calls this deeper cultural commonality the "lifeway," a term used to situate the study of Indigenous religious traditions, including animism, as a guiding force for economic, political, social, and environmental life. As explained by Sponsel (2012):

The roots of spiritual ecology are numerous and deep, perhaps extending back at least some 30,000 years in the case of the Upper Paleolithic cave paintings in France and Spain. Some experts have interpreted this prehistoric art as Animism, a belief in multiple spiritual beings and forces in nature. (p. 7)

The word "animism" derives from the Latin *anima*, meaning spirit, soul, life force, or animating principle. An object is animated if it is regarded as the abode of a spirit. The fundamental idea behind this worldview is the spiritualization and personification of animals, plants, trees, rocks, wind, water, fire, stars, and so on. The inclusion of these agents in the social sphere underpins many characteristics of the ethnobotanical (Rival, 2009) and biospiritual (Thornton, 2011) classificatory systems found among Indigenous peoples.

A central tenet of spiritual ecology is that science and Christianity have contributed to the disenchantment or desacralization of nature that led to the current "ecocrisis" (White, 1967). As explained by Lynn White Jr. in his seminal essay, "The Historical Roots of Our Ecological Crisis":

Both our present science and our present technology are so tinctured with orthodox Christian arrogance toward nature that no solution for our ecologic crisis can be expected from them alone... By destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects. (White, 1967, p. 1205)

The various reactions by Christian theologians and others to White's thesis generated the field of ecotheology, a reactionary defense of Christianity (Hoffman & Sandelands, 2005), and an important component of spiritual ecology.

With the Gaia Hypothesis proposed by environmental scientist James Lovelock and microbiologist Lynn Margulis in the 1970s, the world began to revitalize an ancient animist conceptual system of a

larger scale of life-functioning. According to Lovelock and Margulis (1974): "living organisms create the optimum conditions for their own existence, and in so doing create the superorganism Gaia" (p. 4). The Gaia hypothesis was an important component in the environmental movement of the 1970s that informed the field of deep ecology (Devall & Sessions, 1985).

Deep ecology is concerned with the fundamental philosophical and religious questions about the impacts of humans on ecosystems (Naess, 1973). This approach stresses the importance of a more holistic, spiritual view of nature that enriches the phenomenological and anthropocentric perspectives by focusing on the deeper questions concerning *why* and *how* humans interact with nature. Some criticize deep ecology for being too eco-centric, projecting feelings and rights onto plants and animals (Feinberg, 1974; Pister, 1995) without acknowledging the co-evolutionary role that humans can play in maintaining and enhancing landscapes. Spiritual ecology is similar to deep ecology in that both take a spiritual view of nature and recognize the inherent value of living organisms. Both also call for a restructuring of modern society to address the ecological crisis.

Spiritual geography differs from these kindred frameworks as a less-politically biased, more inclusive, and widely applicable approach for the participatory documentation and understanding of a larger web of life that includes metaphysical space and transcendent beings.

4. A political ecology of landscape

Political ecology is a broad, interdisciplinary, and contested field that includes diverse conceptions of the political, economic, and social factors affecting the environment. This body of scholarship links political economy with ecology and earlier forms of cultural ecology (Vayda & Rappaport, 1968). It emerged in the 1970s and 80s with anthropological and geographical work on development and the environment (Blaikie, 1985; Krugman, 1997), differentiating itself by seeking to understand the political dynamics surrounding material and social struggles over the environment, primarily in "developing" or "Third World" countries. Many criticize the words, phrases, and top-down logics of political ecology, labeling it "politics without ecology" (Bassett & Zimmerer, 2004, p. 103). Some ask, where is the ecology in political ecology? (Walker, 2005) Event ecologists prefer a bottom-up approach that begins with an event that crystalizes perceptions and relationships that lead to environmental change (Vayda & Walters, 1999).

Development broadly refers to strategies that aim to transfer resources and assistance from the world's economically "richer" nations to "poorer" nations; however, many of these projects are focused on building infrastructure that enriches developed countries and their corporate interests enabled by governments that share co-benefits of job creation and taxation. In the face of ongoing labor and resource exploitation, some call for reconfiguring how autonomy as resistance takes place, particularly with regard to underrepresented Indigenous populations (Blaser, De Costa, McGregor, & Coleman, 2010). Blaser, Feit and McRae (2004) advocate using the term "life projects" rather than "development projects" when referring to individual ontologies embedded in local histories: "Thus, life projects are premised on densely and uniquely woven 'threads' of landscapes, memories, expectations and desires" (Blaser et al., 2004, p. 26). In order to understand "life projects," one must first understand local ontologies that often include religious or spiritually sanctioned ethics.

Indigenous communities are subject to a *mélange* of political, ecological, and spiritual frameworks causing regional imbalance, communicative disjuncture (Blaikie, 1985; Blaser, 2009; Watts & Peet, 2004), uncontrolled equivocation (Viveiros de Castro, 2004), and ontological dissonance (Lupovici, 2012) between and within local and external imaginaries (Watts & Peet, 2004). Central to this dilemma is the complex nature of knowledge and the challenges in transferring, managing, optimizing, and co-producing it (Jasanoff, 2004). After all, knowledge is both a source of power and innovation, and a boundary object (BO) shared by diverse communities but viewed or used in different ways (Star & Griesemer, 1989).

Spiritual beings and sacred sites are important sources of ethical beliefs and practices that shape social, economic, and political engagement with the environment; however, political ecology largely omits this dimension of landscape. The following case study reveals the importance of spiritual ontologies in understanding an Akawaio landscape.

5. A spiritual geography of a land of many waters

The etymology of the word "Guyana" (pronounced *Guy*-ana, not *Ghee*-ana) is subject to debate. The most common narrative is that when Europeans arrived in this portion of the New World, Arawak residents referred to the region as Guaiana, meaning "land of many waters." Subsequently, the northeastern portion of South America along the Caribbean and Atlantic coast between the Orinoco and Amazon Rivers was known as Guaiana. Today, the Guianas includes Guyana, Suriname, and French Guiana, an area largely unknown to the outside world. This region has a plethora of large creeks, ponds, lakes, and rivers including the Essequibo, Demerara, Corentyne, and Berbice Rivers in Guyana alone. It truly is a land of many waters, yet many are skeptical of the origin of this moniker.

According to Daphne George, an Akawaio resident of Phillipai Village in the Pakaraima Mountains of Guyana, *kwai* (ite palm trees, *Mauritia flexuosa*, a popular material for crafts) are found throughout the region. *Kwaiekwa* means "place of many ite palm trees" (Cooper, 2015, p. 62). Daphne believes that her ancestors referred to the area as *Kwaiana*, a derivation of *Kwaiekwa*. Another theory about the origin of the word "Guyana" comes from an Indigenous group living on the borders of Suriname, French Guiana, and Brazil known as the *Wayana* that many believe was distorted by the Spanish into "*Juayana*" or "*Guayana*" (Plotkin, 2007).

Just as there are three spheres of influence within landscape, there are also three shamanic practitioners within the Akawaio worldview. The *piyai'san* (*p*-,'one who is'; *iyai*, 'spirit'; *san*, 'kin'; shaman); the *e'toto/kanaima* (sorcerer); and the *Alleluia pukena'* (prophet leader/wisdom possessor; Colson & Armellada, 1990; Cooper, 2015). According to elders, the forests, savannahs, mountains, and rivers of the Akawaio landscape have three principle masters: the first is anthropomorphic and small in stature, primarily known as *Amaiyko'/Maiko'* or *Poito'ma* (Akawaio and Arekuna); *Pta'mna/Patamona/Tamna* (Makushi; *pata* means "place"; *patawonton* are "people from the forest"); and *Adopi* (Arawak). The second category is composed of hairy anthropomorphic giants known as *Ataitai* or *Bush-tai-tai* (Makushi); the highland Patamona, Akawaio and Arekuna call these forest spirits *Piyai'ma* (Cooper, 2015). The rivers are overseen by *Rato* (pronounced "lado" in Akawaio) a water spirit force (*tuna a'kwari* in Ka'pon; *tuna ekaton* in Pemon), also known as the *moro' esa'* ("fish owner/master" in Akawaio).

Each animal, tree, rock, resource, stream, and place is overseen by one of these master-protectors. They must be acknowledged and honored, especially when traveling, hunting, and harvesting forest and river products. In addition to their capacities for violent revenge, they also have valuable knowledge, for healing and otherwise, that can be learned and utilized during *taren* (invocations) and séances.

As masters of the forests, mountains, and watersheds, *Pta'mna*/*Amaiyko'*, *Piyai'ma*/*Atai-tai*, and *Rato* are largely responsible for the protection and continuity of the landscape within a complex interconnected and inter-dependent spiritual geography. By recognizing the animated and transcendent nature of landscapes and the fact that every *thing* and *place* is someone else's domain, the Akawaio honor, protect, and co-manage resources to the collective benefit of past, present, future, seen, and unseen beings.

In the Akawaio worldview, the universe is separated into distinct dimensions (see Cooper, 2015; Fox, 2003): *Ka'pon Pata*, "a place in the sky," the Akawaio equivalent of the upper, celestial, or Sky World. This domain is associated with the male gender, the colors white and yellow, diurnal birds, seminal qualities, heat, spice, bitterness, and the daytime sky, among other things (Colson, 1976). For the Alleluia (Cooper, 2015), this is the source of radiant light energy known as *akwa*.

According to Desrey Fox (2003), an Akawaio *piyai'san* and anthropologist, the Sky World has two sub-categories: the first and furthest away is *Penaro'kon*, the home of the mythological ancestors of the Akawaio including the *Makunaima* and *Wei* (the Sun Father) that energizes and rejuvenates all life on Earth. The other sublevel of *Ka'pon Pata* is the home of "good" *imawariton* (disembodied spirits) that are often summoned during shamanic ceremonies to give guidance and assistance.

¹ The Essequibo River is the largest river in Guyana and the largest between the Orinoco and the Amazon. The Akawaio name for the Essequibo River was Sipu (Daphne George in Cooper, 2015).

² Traditionally, the Demarara River was known as the Yumarari in Akawaio (Daphne George in Cooper, 2015).

The middle or terrestrial world is known as *Nunpon Pata*, "earthly place/home," the domain of humans, plants, animals, and other material constituents, but also including "bad" *imawari* (Fox, 2003). This world is often depicted as a tree trunk, vine, ladder, staircase, staff, umbilical cord, or *axis mundi* (Eliade, 1959, 1964) connecting the Middle World of physical reality with the celestial and subterranean worlds.

Nun O'nun Pata is the "place under the earth" (Fox, 2003, p. 70). This domain is generally associated with the power of darkness, cold, shadow, night, as well as the sweet and nurturing aspects of the female gender (Colson, 1976). Following this logic, when looking up at the night sky, one is actually looking up at the Underworld; therefore, the Western understanding of direction does not necessarily apply to the Akawaio conceptual system. According to Fox (2003), like the celestial world, this domain is also divided into two levels: (1) Apai Awon Pata, "shallow underworld"; and (2) I'nawon Pata, "deep underworld":

The shallow underworld represents darkness where there is nothing, while the deep underworld is full of auric energy. This is the home of spirits of good persons who drowned and other helpful spirits. They function to aid new things that are coming into being such as new ideas, visions, and dreams of various kinds, and they give their aid to only selected souls in the terrestrial world. (Fox, 2003, p. 71)

It is best not to think of the spheres in a vertical orientation separated by distance, but as dimensions of spiritual energy, or what Fox (2003) calls: "spiritual vibrational wavelength" (p. 71). These worlds interpenetrate the material world yet don't correspond to most Western conceptions of space, place, time, gender, and direction. There is a continuum from matter to spirit as all is interwoven in a circuit of energy. The spheres closest to the surface of the Earth—the Middle World—are home to potentially dangerous beings and disembodied spirit forces (*imawariton*), while those further out are generally associated with helpful sources of knowledge.

For the Akawaio, the cosmos is replicated within the human body: the head and chest represent the celestial world; the abdomen to the feet represents the terrestrial world; and everything below foot is the Underworld (Fox, 2003). The body is merely *pun*, "flesh/meat." The *mita* (mouth), *wase'ma* (anus), and *nakata* (crown of the head) are openings to the body that represent portals for the spirit, soul, and *akwa* (radiant light energy).

The a'kwari ("soul" in Akawaio/Ka'pon; ekaton in Pemon) controls the temperament, morale, sanity, health, happiness, intelligence, and the general state of being (Colson & Armellada, 1990). The soul is infused with akwa and is animated by eruparu, "breath" and senumin'kan yen, "the thinking cave/container" or "mind" (Fox, 2003, p. 73). The origin of the breath is the air and the wind that gives life. It is said to be located in the bloodstream and is assembled near the heart and lungs and assists the a'kwari (soul) in maintaining the life of a person. If a person becomes severely sick because of an attack by harmful ene/omá:kon ("outsiders" or "harmful nature spirits" in Akawaio/Pemon), or makoi (demons) and loses their akwa and dies, eruparu (breath) is the last thing to leave the body (Fox, 2003).

It is important to distinguish between the *imawari* (disembodied spirit) and the *a'kwari* (soul). The Akawaio term *a'kwari* (*ekaton* in Pemon) is often used to refer to the spirit, much like Western cultures where the spirit and soul are often used interchangeably. However, according to Quentin, an Akawaio *piyai'san*: "*Imawari* are spirits of the dead that exist all around us, all the time. They help when I beat leaf [perform séances]" (Cooper, 2015, p. 88). Quentin also said that every living being has an *imawari* that is capable of traveling outside the body (particularly through breath and dreaming). For example, if you are thinking or dreaming about someone, your *imawari* will leave you and go to that person. The soul is more connected with the material body made up of *akwa* (radiant light energy), mind, emotion, will, and breath and is not capable of transcendence in the same way that the spirit is.

According to the Akawaio, the human body (esa') is an analogue of the cosmos. Both are fundamentally made up of two different forms of energy. The first is akwa (Ka'pon; auka in Pemon), the "brightness of light" that derives "from the sun's place" and provides the luminosity that is linked to the male gender as well as an individual's intelligence, life force, vitality, or merunti (strength or energy of life). The soul is therefore something infused with akwa (radiant light energy) plus the

possessive suffix -ru or ri creating the word a'kwari. The other moiety of the Akawaio body/cosmos is made up of ewarupu, darkness, shadow, or shade.³ This energy is abundant in caves, mountain crevasses, cracks in trees and rocks, and underwater—all entrances to the Underworld and its constituent beings and forms of knowledge.

Another important concept with regard to the body is the word *ewan*. Colson and Armellada (1990) refer to this phenomenon as a *yewan*, "matrix": something within or from which something else originates. Physiologically, the *ewan* refers to the abdomen where vital organs are held and food is metabolized into energy. In women, this is where babies develop in the womb. In Akawaio, *mure ewan yau* means "child in the belly." Ewan can also refer to the torso of the body minus the head and limbs. The heart organ, *ewan ena'pi*, "torso seed," or *ewan tipu*, "torso stone," is considered the central organ in the torso.⁴

Every part of the body—eyes, ears, nose, elbow, foot, hand, calf, etc.—has its own *ewan* or vital center that is animated by a sliver of *akwa*.⁵ A hammock is also commonly referred to as an *ewan* since it is much like a womb that rejuvenates and gives *merunti* (strength or energy of life) to people when they take *seruma* (a period of restricted diet, isolation, and rest, especially when sick). One of the most important roles of the *piyai'san* is to retrieve the *akwa* that has wandered off or been forcibly removed from a specific *ewan* conceived as a *yapon* (seat, stool, or bench; Colson & Armellada, 1990).

The Earth also has many *ewan*. Many Akawaio *Alleluia* songs and prayers plead for God to provide *pata ewan* (fertile land/plentiful crops; Cooper, 2015). Fertile ground (female principle) is pierced and impregnated by the seeds of radiant light energy of the sun (male principle) to generate new life in the form of plants. The world therefore springs forth from *pata ewan* in an eternal cycle of fertility between gendered spheres.

The Waiaka panton (Tree of Life story) is a popular Akawaio creation narrative in the Upper Mazaruni River basin of Guyana that tells of a giant silk cotton tree that held all the foods of the world that was chopped down by the Makunaima demiurge heroes that felled the magical tree to the northeast—in the direction of the Upper Mazaruni basin (Armellada, 1964). Just before the tree fell, each of the three main rivers in the region was asked if they wanted pata ewan (fertile land) from the Waiaka. First, Kukuiyame (a female name referring to the Kukui River) answered: "Yes, a little." Then Kamurani (Kamarang River) was asked if she wanted pata ewan and she answered: "Yes, a lot!" Finally, Masurime (Mazaruni River) was asked, but she didn't answer. Consequently, the land along the Kukui has some fertile land while the Kamarang has a lot of pata ewan and the Mazaruni has the least fertile soil along her banks. The concept of ewan transcends the human body to the material culture (hammock) and the surrounding landscape as a universal "womb of life."

Another form of womb (*mire yen*: Akawaio for "baby container") or "increase site" for the Akawaio is known as a *yen*, meaning "enclosure," "cage," "bag," "container," or "cave." A yen usually appears as a hole in a rock that is associated with a specific animal and usually has a *panton* (story) that explains its significance. For example, according to an Akawaio *panton*, many years ago, enemies raided Chinowieng and a brave young man decided to hide in a *yen* that *sinau* (frogs) like to hang out in. When the enemy passed by, he made the sound of the *sinau* to fool his enemies. This is how the village of Chinowieng (*sinau yen*: frog cave) got its name. Other increase sites in the area include: *waiken yen* (savannah deer cave between Phillipai and Chinowieng); *pero yen* (dog cave), a hole in the ground near Wax Creek "where you take your dog to become pregnant"; *piinki yen* (hog cave) near Paruima; and *kari'so yen* (rooster cave), an increase site near Amokokupai.⁶

³ According to astronomical research, the universe is composed of approximately 4.9% ordinary matter, 26.8% dark matter, and 68.3% dark energy (Copeland et al. 2006). In other words, 95.1% of the universe is made up of dark matter and energy.

⁴ In contrast to the heart and torso, the *pai* (head) is the seat of intelligence, *pu* (wisdom), knowledge, and reasoning which is suggested by the Pemon phrase *ti-pai yaki-ke ichi*, which means "he has brains [*yaki*] in his head," or literally: "his-head with-brains is" (Colson & Aremellada, 1990, p. 16).

⁵ According to a personal communication in 2013 with Cheyenne scholar, Winfield Coleman, much like the Akawaio conceptual system, the Cheyenne people of the Great Plains of North America believe that individuals have multiple spirits within the body. The breath, bones, and hair all have their own spirit. Additionally, each joint is considered an eye or portal into the body. In the Great Plains and in Amazonia, a ligature (known to the Akawaio as an *apota*) is worn above the calf or bicep to swell the muscle and make an individual stronger. Likewise, headbands were worn to confine power within the head.

⁶ In addition to the increase sites mentioned above, there are also several other caves of interest near Amokokupai, including: kiisi'yen where swallows (imawari birds) come out; mo'kari yen, which means "taking out cave" where the Akawaio used to "take enemies and eat them"; and marupa' yen (bat cave) near the head of the Kukui River. Another form of yen is discussed within the context of the Alleluia religion and the heavenly music that emanates from liga-liga, a form of yen or container.

These potent *yen*/resource increase sites are generally kept secret and are not to be "troubled." When there is an abundance of certain animals such as jaguars, peccary, laba, or aguti that are threatening people or destroying farms, people will go to the *piyai'san* to ask for help. The *piyai'san* will then use his or her powers to talk to the master-owner of the animals and ask them to "lock-up" the surplus in a *yen*. Likewise, if there is a dearth of certain game animals, the *piyai'san* will ask the masters to release them. In order to activate a *yen* and release the animals, someone knowledgeable will poke a stick into it simulating a sexual act. The animals would not come out immediately — perhaps within a week—and they do not come directly to the *yen*, but to the general area. When the animals first come out, they are in *imawari* (disembodied spirit) form.

One place that the animals may eventually manifest is in the *potawa*, a food and wilderness "reserve." This part of the Akawaio ancestral land is generally located in a remote mountainous or highly forested area. In contrast to the hunting grounds, the *potawa* functions much like a wildlife reserve that is left undisturbed so that animals and their spirit masters can live freely. According to Daphne George: "All these things belong to the Akawaio. If others come and take our land, *yen* and *potawa*, then *imawari* will come out and destroy them and the Earth" (Cooper, 2015, p. 92).

6. The missionary influence

The Guyanese often say that everyone who comes to their country is a missionary, mercenary, or misfit, and often a mix of all three. Beginning in the 1600s, and continuing to this day, religious institutions have been active in Guyana. Increased interactions between newly connected hemispheres caused a clash of biological and conceptual systems, violence, migration, and the development of syncretic movements. Missionaries were adept at using Christian narratives to replace Indigenous *panton* (stories), including depicting Christian saints as equivalent to local animist spirit forces and replacing local mythologies with biblical narratives (e.g. flood, Tree of Life, and good vs. evil; Colson, 1996). In an ironic historical feedback loop, Indigenous Peoples of the New World were drawn to Christian narratives that were originally influenced by pagan oral traditions of the Old World.

During the colonial period, the Dutch, English, Spanish, French, and Portuguese scrambled for control of territory. The establishment of missions was critical to the colonial pursuit of command and control, leaving behind a largely Christianized landscape. Some early missionaries recorded valuable ethnographic information and conducted noble humanitarian work; however, by the 1800s, Christian dogma propagated by Spanish Catholic missions slowly erupted throughout the Orinoco Delta; the Dutch and English Anglican faiths slithered up the Essequibo and Cuyuni rivers of Guyana; and the Portuguese Catholic flag was raised in what is now Roraima State, Brazil.

In contrast to the coastal groups largely displaced by European colonization, those in the interior tended to remain in specific geographical zones living rotational subsistence lifestyles. Settlements of extended family units, particularly those in the forested areas, were not permanent since soil fertility was poor and there was a constant need to move; therefore shifting cultivation was associated with shifting settlements. These patterns were significantly altered when Christian missionaries began to arrive in Guyana's interior in the mid-1800s (Colson, 1996).

Religious leaders asserted themselves and undermined traditional authority structures by banning Indigenous dancing sprees, rites, and rituals including the use of tobacco, *muran* (charms), *taren* (invocations), and all practices associated with the *piyai'san*, *e'toto/kanaimi* (sorcerer), *pukena'* (Alleluia wisdom possessor/prophet leader), and other spiritual agents that inhabit the landscape. Fermented cassava drinks such as *paiwari*, *casiri*, *parakari*, and *kasa'* were banned. For the Seventh-day Adventist Church, Indigenous communities were eating unclean meats such as pork, tapir, agouti, skin fish, shrimp, crab, reptiles, duck, worms, and turtles—each an important source of nourishment.

⁷ The same rules apply to *tipu*, charm stones (see Cooper 2018). The ownership and care of these stones and *yen* is a serious matter best left to trained elders. As discussed in greater detail in Cooper 2018, *tipu* are used to release certain game animals from Nunamirita that enter the terrestrial world through *yen*.

As explained by Clifton Lorendo, a Christian Makushi elder from Yupukari:

Before the missionaries, we would kill outsiders like you with an arrow or blowpipe dart in your back. Everyone used to live with their families in small savannah clearings in the bush [points to Kanuku Mountains] and come together to drink, sport-up [party] and do all sorts of wickedness. (Cooper, 2015, p. 74)

When missionaries arrived, all of this changed. Transitory family units were encouraged to live in villages and attend church regularly; therefore they became more sedentary (Colson, 1996). Wherever the missionaries went to evangelize, their first concern was to build a church and school. This process enabled colonial powers to control, convert, corral, and materially coerce Indigenous peoples into "civilized" Christian lifestyles.

The 19th century was a time of missionary fervor where native peoples were seen as "fields ripe for the harvest" (Menezes, 1979, p. 215). Missionaries frowned upon those who practiced polygamy and outlawed cross-cousin marriage as incestuous. Some argue that the introduction of Christian marriages resulted in an increased number of extra-marital affairs by both men and women, leading to conflict, wife beating, and divorce (Menezes, 1979). In general, the Christianization and "civilization" of Indigenous peoples was seen as compensation for the loss of land. In other words: "Amerindians were offered heaven for their earth" (Menezes, 1992, p. 67).

After slavery was abolished (1834), there was a dearth of labor to exploit on plantations and continued strong demand for sugar and other colonial commodities. Consequently, the indenture system was established as a form of debt bondage that brought over a million East Indians (mostly from Calcutta and Madras) to various European colonies until 1920 (Northrup, 1995). Landowners paid for passage, food, clothes, shelter, and training in exchange for a term of bondage (usually four to seven years). When this time was complete, these individuals became independent and were paid "freedom dues" often given in the form of land. As free people with land they soon became a political force that stood in opposition to rich plantation owners and a large, landless, urban Afro-Guyanese population.

In 2014, the population of Guyana was 803,700 (World Bank, 2014). This population is roughly divided between: East Indian (43%), African (35%), mixed (10%), Amerindian (9%), Chinese (2%), Brazilian (1%), and other (1%). Mainstream religion in Guyana is broken down approximately into Christian (40%), Hindu (35%), Muslim (9%), and other (16%) (Spencer 2007). Among Indigenous populations (primarily in the interior), Christianity is the main religion. Almost everyone is concentrated on a 5-10 mile strip of the Atlantic coast, primarily in and around Georgetown, the capital. The ethnically heterogeneous population is loosely integrated by a Creole culture and language that has evolved during the last two hundred and fifty years. Despite the country's motto—one nation, one people, one destiny—ethnic and religious cleavages erupt from time to time, often due to political manipulation.

One consequence of colonialism, missionization, African slaves, and East Indian indentured servants (each group with its own spiritual ontologies) was the emergence of numerous syncretic movements including *Maroons* (escaped slaves), *Chochiman* (churchman), *Chimitin* (church meeting), *Krichin* (Christian), *Oli Go* (holy ghost people), *San Miguel*, and *Alleluia* (Hallelujah or Areruya; Colson, 1996; Cooper, 2015). The Guyanese are known for unique syncretic practices developed through a process of selective resistance (Staats, 1996), adoption, and adaptation of exogenous knowledge and ritual. These syncretic revitalization movements, often secluded in remote geographies, function as arks for knowledge and diversity through floods of change.

7. Participatory spiritual geography

Participatory approaches represent the best methods for the ethical documentation and comprehension of the spiritual dimension of landscape. This is especially true for non-Indigenous scholars who seek to map and understand an Indigenous landscape after receiving Free Prior and Informed Consent (FPIC), as guaranteed under Article 10 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007).

Many researchers have used effective participatory techniques (Emmel, 2008) to compare scientific and traditional knowledge (Cronin et al., 2004), though some have had less success. The most notable controversy surrounding participatory methods used to map an Indigenous territory was the México Indígena Project, part of the larger "Bowman Expeditions," jointly funded by the U.S. Foreign Military Studies Office (FMSO), the University of Kansas, and the American Geographical Society (AGS), working with the weapons company Radiance Technologies (Wainwright, 2013). For further research on the complications of anthropological research, see Price (2011).

Despite the challenges of cultural misappropriation, misrepresentation, biopiracy, land and intellectual property rights, maps of Indigenous communities exist, mostly through local imaginaries and community efforts, but also with help from outsiders such as the Amazon Conservation Team (Boyle, 2005). These maps can serve to empower Indigenous communities (see Cooper & Kruglikova, 2019 for a detailed discussion of Indigital, an Australian Aboriginal tech startup used to document and share traditional knowledge in the Kakadu National Park and beyond). Despite marginal social and economic progress with new technologies and other forms of exogenous influence, risks remain. For this reason, Indigenous knowledge and maps are often confidential because of the sensitive nature of the information, especially with regard to sacred sites that elders and village council members do not want publicized, and for good reason.

8. Conclusion

Landscape is a dynamic and complex domain composed of natural, cultural, economic, political, and spiritual significance. Historical ecology is a valuable research program for understanding the complex dialectics embedded within landscapes, with an emphasis on material exchanges that largely avoids the spiritual ontologies that hold Indigenous landscapes together. Spiritual ecology provides a basis for the inclusion of metaphysical dialectics in landscape, yet it maintains a political bias that limits its applicability. Political ecology is also deficient in its lack of attention to the spiritual and religious components of the human-environment relationship.

The case study of the Akawaio in Guyana demonstrates the important role that religion and spirituality play in the perception, transformation, history, and politics of a contested Amazonian landscape. Ultimately, spiritual geography represents a valuable bottom-up, participatory approach for the recollection, transfer, documentation (written, audio, video, and digital), and analysis of landscape morphology, especially within Indigenous animist contexts. With clear benefits and risks to the inclusion of the spiritual dimension in landscape, further research is needed to fully understand and ethically engage with this domain.

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