

Ancestors' times and protection of Amazonian Indigenous biocultural heritage

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Abstract

This article discusses how for the Apurinã community in Brazil, the relationships with certain places and nonhuman entities actually co-produce biocultural heritage. This involves not only storytelling, care, and respect, but also avoidance, and thus shows specific intergenerational ways of managing and relating to the land. Here I will especially address Apurinã ancestral forest and historical places, and the experiences and knowledge that they trigger, including stories of Apurinã ancestors, core values, ways of relating in the communities, as well as preferred ecological practices passed down through the generations. Besides the current Apurinã community, their biocultural heritage is shared and protected by various nonhuman actors who are its true owners. The ontological dimension of the Amazonian biocultural heritage also involves a temporal aspect, as the nonhuman entities contributing to its production can be activated and interacted with from different times, from the distant past to present times. Finally, this article discusses how international cultural laws protect such an understanding of the biocultural heritage, and shows that they offer insufficient space for nonhuman actors in biocultural heritage protection.

Keywords

Amazonia, Apurinã, ancestors, biocultural heritage, ancestral forest, biocultural landscape

In Apurinã, like in many Amazonian languages, there are no straightforward terms for “culture,” “tradition,” or “heritage.” Their equivalents would be expressions that refer to certain modes of acting, behaviour, values, and corporeality that often differ from those of others, such as the Apurinã’s ways of doing things or eating only certain foods. In discussions with state representatives and authorities as well as in Indigenous politics, the Apurinã use the terms “culture,” “tradition,” and “cultural heritage,” and they often refer to their material and immaterial cultural heritage, such as music, dances, art work, and craftwork, such as ceramic traditions, baskets, bows, arrows, headdresses, geometric designs, and ecological knowledge, including medicinal plants, as they are often taken as expressions of indigeneity by non-Indigenous people (cf., for example, Graham & Penny, 2014). However, they are in fact an inseparable part of other practices and choices that are consciously and unconsciously regenerated when aiming at maintaining individual and communal well-being. The immaterial cultural heritage of Brazilian Indigenous peoples in particular is crucially about different ways of knowing and being: ways of seeing and visualizing, knowing plants, people, and so forth (see, for example, Gallois, 2006).

As a result of global attempts to protect cultural heritage among different peoples, several legal frameworks have been designed. In general, cultural heritage is protected by several UNESCO cultural heritage conventions.

Indigenous cultural heritage in particular is strongly protected not only by UNDRIP, the United Nations Declaration on the Rights of Indigenous Peoples 2007 (such as article 31),¹ but also by human rights instruments, the UNESCO 2003 Convention on Intangible Heritage, and conventions by the WIPO, the World Intellectual Property Organization.² As Indigenous cultural heritage is closely related to traditional knowledge, it is good to be reminded by article 8 (j) of the Convention on Biological Diversity (1992) that recognizes knowledge and practices of Indigenous communities³ (see the introduction to this special issue).

Earlier academic studies have drawn attention to the importance of the recognition of Indigenous rights in a broad framework, such as land and educational rights, for the protection of Indigenous cultural heritage (e.g. Castillo & Strecker, 2017). The Expert Mechanism on the Rights of Indigenous Peoples (EMRIP) has also underlined that cultural heritage is closely linked to the land and environment. In its study on Indigenous cultural heritage, it notes, “Access to and use of lands, territories and the environment are essential elements of cultural heritage for

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many indigenous peoples. The connection between land rights and cultural heritage is strongly embedded in international legal instruments and in international jurisprudence” (EMRIP, 2015, p. 14). I contribute here to this discussion, by offering an Amazonian view concerning the importance of human–ancestral lands connections in the production and protection of Amazonian Indigenous material and immaterial cultural heritage. Here I will especially address Apurinã ancestral forest and historical places, and the experiences and knowledge that they trigger, including stories of Apurinã ancestors and nonhumans, core values, as well as preferred ecological practices passed down over the generations.

I will draw on biocultural heritage as an analytical concept, which aims to bridge the conceptual division between “nature” and “culture.” Biocultural approaches have been increasing in various fields of academia and civil society, especially in debates about conservation, biodiversity, and community well-being (Maffi, 2001; Maffi & Woodley, 2010; Pert et al., 2015; Verschuuren et al., 2014). In legal discourse, biocultural rights have come to underline the community’s traditional stewardship, resources, and management of the land (Bavikatte & Bennett, 2015). In this article, the term “biocultural heritage” refers to the Apurinã cultural heritage understood in the context of relational ontologies, in which nonhuman entities and the natural environment cannot be separated from being a human (cf. Descola, 2005). In this framework, my main aim is to reflect on the intersections of communal and external (national and international) cultural heritage protection protocols concerning Apurinã ancestral forests and historical places.

This article builds on my ethnographic data on human–environment interactions within Amazonian Indigenous communities, where the findings underline how Amazonian Indigenous history, present time person-making, and future-crafting cannot be separated from the environment (Virtanen, 2012, 2015, 2016; Virtanen & Apurinã, 2019). It is also based on archaeological projects in Southwestern Amazonia in which I have participated and have brought local Indigenous participants into the interdisciplinary research as collaborators. Here I include various Apurinã communities with whom I have collaborated since I started my research in the Brazilian Amazonia in 2003.⁴ Today, the Apurinã live in several Indigenous territories, principally in the state of Amazonas, and number approximately 8,000 persons. They are one of the Brazil’s over 300 Indigenous groups. The Apurinã people (*Pupÿkarywakury*) have long inhabited the Purus River region. The Upper and some parts of the Central Purus River are known for their geometric earthworks and monumental ceremonial sites, evidence that the area was already inhabited by Indigenous peoples more than 3,000 years ago. The links between the precolonial constructors of these sites, of which today over 500 have been located, and the current Indigenous peoples are difficult to prove, but the sites still have a specific place in contemporary Indigenous peoples’ memory (Virtanen & Saunaluoma, 2017). The earthwork sites are also found in an area where numerous Apurinã territories are situated

today, but from the area where the earthworks have mostly been identified, the ancient Apurinã territory extends much further down river to lower parts of the Purus River and its affluents.

My methods of working with the Apurinã are based on participant observation and conversational dialogues and exchange of ideas (see, for example, Kovach, 2009), which have occasionally also taken the form of storytelling and talking circles in which several community members have participated. Storytelling has continued during evening meals and until the late hours, as well as during our shared walks, travels, and many other daily activities. Kovach (2009) notes about using story in research:

Along with a choice of method for hearing others’ stories, there are implications for a co-creation process that interpretative narrative invites. In co-creation knowledge, story is not only a means for hearing another’s narrative, it also invites reflexivity into research. (p. 100)

My collaborative work with the Apurinã has been based on continuous reflections and learning to carry out research within Apurinã epistemology, ontology, and axiology (cf. Wilson, 2008). During the years, the Apurinã of different ages have taught me their crucial values, which have given me the capacity to evaluate when to use and share with outsiders the Apurinã knowledge I have learnt. In the Apurinã community, not only elders (*kiumanetxi*) especially have been my teachers but also other persons who are knowledgeable masters about specific things. They can also be young persons, and in this sense, knowledge transfer does not have age limits. My teachers have also been the *mÿÿty*, which Apurinã translate as shamans (Apurinã also use the term *pajé*, which is *mÿÿty* in Portuguese), who are specialized in Apurinã history and socio-cosmology.

In the following sections, I will address Apurinã ancestral forests and historical places, opening up a discussion on the nature of the Apurinã’s biocultural heritage as well as why certain places are significant for them. I will then discuss the ownership of biocultural heritage, which is not limited to humans in the present. Besides addressing the ontological aspects of biocultural heritage, this study points to new temporal aspects: the well-being of both ancestors and present and future generations. Finally, the protection of biocultural heritage based on nonverbal and verbal communication, stories, and secrecy transmitted to future generations, will be discussed. Finally, I will discuss how biocultural heritage could be strengthened by the implementation of cultural heritage laws and international conventions.

This study argues that the external protection and strengthening of the Amazonian Indigenous cultural heritage should be employed not only contextually, but also relationally, paying attention to both ontological and temporal aspects in the Amazonian co-produced cultural heritage with nonhumans. The Amazonian Indigenous cultural heritage is motivated by and originates from intergenerational relationships with the environment and with ancestral connections. A critical consideration is

required when one raises the question whose cultural heritage are we talking about. It is not only humans as a collective who have a right to their cultural heritage, as for the Apurinã, it is especially nonhumans who are the owners of what can be called biocultural heritage. Furthermore, as will be shown, this also involves a temporal aspect, as ancestral land and nonhuman entities exist within their own temporal time frames, and can become activated and related to even from the distant past.

Human–environment relations and ancestral forests, *săkanany*

Along the Tumiã River in Central Purus and many other affluents of the Purus River, ancestors' previous settlement places and gardens can be observed in the different vegetation, revealing a biocultural heritage that is materialized in collective and individual relations with the environment. These are historical places that for mobile Apurinã, who are travelling by canoes or boats or trekking to collect resources, hunting, fishing, travelling to visit their kin or to take care of other issues such as their health or buying merchandise, are also places that affect them emotionally.

Many of these places are by the smaller tributaries of the Tumiã, which are named according to human–nonhuman encounters and perceptions, such as the tributary of ants (*Katxipykyryã*), bamboos (*Purenaruã*), big owl (*Ûtiã*), and so forth. When I was passing the *Masaiã* tributary with one of Apurinã interlocutors, Abel, knowledgeable in the history of the river, we stopped and visited one of the previous settlements, where he soon pointed to couple of cupuaçu trees, which his uncle, Siqueira, had planted. Abel told that at the time these fruit trees had been planted, he had himself been just a boy, and now he was at his 40s. He explained about the place: where their gardens had been situated as well as different paths that still connected the place to other ones. Abel drew my attention to several edible fruits of the place, and we enjoyed one of the forest fruits, not only specific for Apurinã diets but also with specific taste eaten in specific ways (see also Van de Port & Mol, 2015). The emotions and memories related to places and landscape are corporal and connect people to their ancestors (see Erlil & Rigney, 2009). Hiemstra and colleagues (2014, p. 42) state that biocultural landscapes as reciprocal human–landscape relationships also provide a sense of place and home as well as supply a place for inspiration and creation that contributes to overall well-being.

Even if the fruit we ate in the *Masaiã* tributary grows noncultivated, it is protected by the community. The same applies for the present tucumã palms still growing in the place, which according to Abel originated because his kin had been eating tucumã palm fruits there. His ancestors' knowledge and actions are present and visible in the contemporary landscape, and in fact, Amazonian forests have been largely domesticated since precolonial times (see, for example, Franco-Moraes et al., 2019; Levis et al., 2018).

For the Apurinã, their biocultural landscape is a product of previous and present generations. It also includes ancient slash-and-burn fields (*swiddens*) and gardens called *săkanany*, where still today grow wild bananas and several plants associated with the ancestors' influence in forest transformation (see also Balée, 1994; Junqueira et al., 2011). These anthropogenic patches show the ways in which the Apurinã managed their forests, what the ancestors planted, grew, ate, and how they fed their little ones. Even if the knowledge of ancestors is shared by means stories, it is also evident in specific cultivated products, such as *cará* (*mutu*), *asriã* (*kataky*), *taio* (*wayky*), *txuky*, *inimpi*, and *iaia*, that are not found among the other neighbouring peoples, but are specific to their diets.

Today, when the contemporary highly mobile Apurinã trek along the rivers, they often stop and collect the resources from the *săkanany* that their ancestors had planted and cared for, especially palm fruits, and the Brazil nuts that still grow in these places. In addition, the ancestral forests offer medicinal plants and springs providing drinking water for the Apurinã communities. The affluents of the Purus River are only partly demarcated for the Apurinã (for instance, the areas closer to the headwaters), but their ancestors' cultivations are in evidence from the river mouths to the headwaters of affluents (see also Virtanen & Stoll, forthcoming).

The patches of different vegetation that reveal the activities of ancestors are invisible to most non-Indigenous visitors until they are revealed by the Apurinã stories of these places. For the Apurinã, the *săkanany* along the river and inland are known by their past owners, for instance, the *săkanany* of a grandfather, and so forth. Visits to these places or passing generate the acts of remembering and recalling (see also Battiste & Henderson, 2000/2012; Basso, 1990; Morphy, 1995; Santos-Granero, 1998). The historical places and ancient plantations remind the Apurinã of events that have occurred there, the births, deaths, diseases, marriages, and so forth of different community members. Furthermore, the Apurinã's forest management practices are based on a technique that after a certain time, when the land has been rested and grown over, the people return to the place to make gardens. This can take several generations.⁵ Even if the *săkanany* are not evidence about the long-term migrations paths as such, rather of being places where Apurinã families lived and after a certain period moved to a new place, here it is true as Gregory Cajete (2017) has noted, "In many Native American migration myths, it is implied that the 'ancestors' left representations of themselves in various natural forms or phenomena to remind people how to act and how to relate to the natural world" (p. 120).

The visits to historical places and stories about them are a crucial part of forming kinship, as well as educating about desirable and good behaviour along the lines of former generations. People may discuss why certain families moved to a different place and what the consequences of their actions were. Anthropogenic forests thus convey stories that reflect the life and morality of the people who lived there. Yet, they not only deal with human-to-human

relations but also with human's relations with nonhumans, such as owner and ancestor spirits that will be addressed in the next section. Furthermore, human acts and movements also impacted the role and movements of wild animals, which likewise had their own influence on the landscape. Animals, plants, and other nonhuman entities' affect the kinds of relationships produced with their own characteristics and thus have had and still have an active role in shaping the biocultural landscapes and heritage of Apurinã. Hence the Apurinã ancestral forests have been mutually transformed by both humans and nonhumans. This kind of historicity has numerous consequences for the actual practices of the Apurinã, such as care and respect towards ancestral land and its living nonhuman beings through which the Apurinã learn to know and to be. It is also crucial for hunting, fishing, trapping, and predicting the weather. Berkes (2012, pp. 4–5) notes that one of the qualities of traditional ecological knowledge is that it is moral, involving reciprocity and commitments towards the community and other beings. Apurinã traditional knowledge is, thus, not only technical knowledge about ecological relations, but involves emotional aspects, values, and transitions in time and space.

Transformative places and their temporality

For the Apurinã, traditional expertise on the specific interactions of human–environment enables health, plantations to grow, and incorporation of resources from the land. Their biocultural landscape embeds the places (“houses”) of owner spirits (*awĩtetxi*), also known as chief or master spirits. They are specific agencies among several Amazonian peoples, based on the Amazonian Indigenous idea of ownership and mastership according to which entities are owned and controlled by someone, but these owners meantime care and nourish those who respect them (see, for example, Descola, 2005; Fausto, 2008; Hirtzel, 2007). For the Apurinã, these nonhuman beings are typically not only landscape differences and powerful trees, but also stones, as I have described in my previous works (Virtanen, 2015, 2016), which employ not only respect but also emotions of fear that lead to avoidance, and are carefully approached. These are charged entities and, thus, have highly ambivalent transformative capacities: they can give strength, stamina, heartiness, and vigour, but they also cause illnesses, which in Apurinã thinking are metaphysical particles (“stones”) that the spirits can send. Consequently, as is common in several Indigenous communities, people learn from an early age to carefully ask permission from the owner spirits whether they can extract some natural resources in these places, and this is common for several Indigenous people (see, for example, Helander-Renvall, 2010, p. 48). In the Apurinã community, this has impacts for actual practices taught, and children and youth learn to become thinkers by evaluating things in relation to other things.

The so-called master animals and trees, among other things, are not only respected and negotiated in order to

have avoid illnesses and obtain sufficient subsistence, but as said in Apurinã relational ontologies relating to owner spirits and other spirits to also embed the idea of reciprocity, mutual nurturing, and protective actions between them and humans. Many other nonhumans, such as wind and other meteorological phenomena, are also interrelated to persons (see, for example, Descola, 2005), and Apurinã oral histories tell their life stories and origins. The personified entities of the land are closely related to the Apurinã's values, reminding of elements that give life and contribute to life-making. Local biopolitics is fundamentally about life- as well as knowledge-making with these nonhumans (see also Santos-Granero, 2012, on the Yanasha).

Furthermore, absences of charged nonhumans are also considered in the Apurinã biocultural landscape: there are entities that no longer live in their former places, for instance, monstrous beings that shamans have sent away, and even though their absence may no longer cause acts of avoidance, these places still mediate memories (Erlil & Rigney, 2009), remembering, and reflections on the past.

There are also places called *kymyry*, which are one of the most transformative places in the animated Apurinã biocultural landscape. *Kymyrys* are found throughout most of the Apurinã's territories, but knowledge of their exact locations is only shared within the Apurinã communities themselves. For the Apurinã, they are the places of past shamans, with proper names. These are not actual burial places, only the places of the past shamans' spirits (*kymyry*) that have moved and now remain there, and only experienced people can approach or even tell about them.⁶ As the places of community's past spirits, they offer sites of communication and offer guidance for the community. They connect to intergenerational histories and knowledge, and to the times of ancestors. When the *kymyry* are not disturbed, they reproduce the life of communities in balance (see also Apurinã, 2019).

Apurinã ancestors also speak through animals, as several of them are in fact thought of as being past community members who have been transformed into an animal (see Virtanen, 2016). A rich repertoire of Apurinã oral histories tells how past generations lived their lives, the decisions they made, and how certain immoral actions in particular had turned some into an animal and forced them to leave their human communities. *Mjyty*, shamans, especially after their death, remain to guide their people in animal form, such as birds, and indicate several things. Hence, their movements and sounds are carefully observed in order to use that guidance, which in turn is collectively shared, forming a crucial part of Apurinã sensed and embodied ecological knowledge. These indicator beings are related to as family members and called by kin terms.

Owner and past shaman spirits are not necessarily beings from a mythological distant past, or from “ancient times,” that would be marked linguistically by the term, *kitxekapirika*, mentioned, for instance, when narrating stories of ancestors. Past shamans may have lived recently in the community. There are also many timeless entities, because no one knows their origin. Despite their different times and a long period of time that they represent, they are

all living and acting entities in the here and now, when their agencies are actualized in relation to specific places, practices, and skills, such as their specific ways of acquiring environmental knowledge, involving connections with forests, waters, animals, and other life forms. Thus, the immaterial and material heritage cannot be separated from the ancestral land.

Besides ancestors' physical presence experienced in certain places and knowledge, they are interacted with through stories, chants, objects, musical instruments, body paintings, foods, and so forth. For instance, *kynyry* festivals are places where a large repertoire of Apurinã songs can be heard that are inspired and given by different ancestors, owner spirits, animal, plant, and meteorological forces' spirits. It should also be remembered that these interactions are a source of shamanic knowledge.⁷ Apurinã elders and parents in particular take into consideration how children and young people are "made" in the interactions with nonhumans of different times.

Overall, the specific places and entities of biocultural landscape affect the social structures that maintain and reproduce well-being in the community. This involves responsibilities, as elements in the ecosystem are dependent on each other (Berkes, 2012; McGregor, 2004, p. 388). Apurinã biocultural heritage is holistic and involves diverse cultural, ecological, spiritual, and economic aspects and knowledge. Furthermore, Apurinã biocultural heritage is about the past and future generations that are both linked in the present. Acts in the here and now are considered to affect both future and past generations.

Ownership of the Apurinã biocultural heritage—beyond humans

As mentioned earlier, ancestral forests and sacred places tell about real beings who have lived at different times, and they negatively affect people who do not act towards these places in respectful and reciprocal ways. Consequently, besides the Apurinã, also nonhumans, ancestor and owner spirits in particular, participate in the governance and protection of the Apurinã biocultural heritage. Several explained how *kymyry* places are protected by nonhumans, such as these words from an older woman in a Kamikuã village:

There [in *kymyry* places] are our shamans (*mÿtywakuru*) who have passed away, and they stayed there. And there is a little bird which says *txii txii txiu txiu*, and says to you, don't go forward, there is a thing that will grab you, and will take you. You go there, and then you have to leave. You can pass it by a path, but no one can go there. Not babies or people who are sick. [. . .] And there are other sounds. There are many paths [. . .].

As we can see from this quote, it is not only humans who are the owners and protectors of biocultural heritage, such ownership goes beyond the human, as nonhumans are the crucial actors in protecting it. Such an understanding contrasts with settler colonizers' thinking, who brought

with them the idea of private human ownership (see, for example, Church, 1904).⁸ On the contrary, ancient shaman spirits and indicator animals, as presented in the previous section, are in fact real persons, and so the previous generations are still active in the protection and control of the communities' cultural heritage and well-being. Certain places have potency to harm and maintain life, and thus they should not be approached without respect. The nonhuman entities also control where and to whom their power and knowledge is transmitted.

The Apurinã's own way of protecting their human–environment interactions is to share the stories of the historical and transformative places only orally between themselves, and thus protect the richness and health of their ecological relations, of which their ancestors are a crucial part. The stories as well as the place names pass on knowledge that embeds long-term human–environment interactions and knowledge-production between generations. Furthermore, as Keith Basso (1988, p. 121) has similarly noted about the Western Apache's naming locations within the landscape, for the Apurinã, these stories of places affirm the value and validity of ancestral knowledge, convey sentiments of personal and collective support, offer practical advice for personal situations, and offer emotional healing. These aspects are present in various Apurinã oral stories that tell how the transformative places are related to the life histories of community members. In this task, Indigenous languages are crucial vehicles, and linguistic concepts, codes, and principles often point to agencies of the environment, responsibility, and ownership of human and nonhumans, or elements that cannot be owned by anyone.

Besides oral transmission, Apurinã traditional knowledge on charged places and entities is also transmitted non-verbally, and can be given a visible form through experience. The *kymyry* are known for their specific soundscape and animal movements, and the feelings they evoke in people link community members to previous generations. They are not used for housing, economic activities, or other activities of daily life. In these places associated with powerful nonhuman entities, people are quiet and report unusual experiences.⁹ They are not spots, places, or areas that can be clearly defined, as their potency is manifested through people's life and health over distance and time. Their non-explicable and unknown aspects, albeit clearly discussed and guided by the elders, is mostly invisible to outsiders, but is at the core of what it means to be an Apurinã in the past, present, and future. Indeed, from the Amazonian Indigenous perspective, ancestral lands are the basis for a biocultural heritage that is lived, sensed, and protected by the communities, but not necessarily exposed to others. Di Giminiani (2015), who has discussed Mapuche land claims and notions of place, writes "Approaching land as a sentient subject invites us to analyze ancestral land connections as more than mere metaphorical expressions of indigeneity" (p. 494).

Secrecy is also one of the tactics to protect cultural and biocultural heritages (see, for example, Carmichael et al., 1994; Helander-Renvall & Markkula, 2017).

Helander-Renvall and Markkula (2017) describe silence and secrecy in Sámi communities:

Another reason for this secretiveness of Sámi relates to the risk that outsiders misappropriate their traditional knowledge, as soon as this knowledge becomes oral or published in print, and therefore measures are taken locally to prevent the flow of information from the traditional knowledge holders to non-members of a Sámi community. (p. 117)

Thus, secrecy and nonverbal and verbal communication are important ways of transmitting cultural heritage, depending on the subject and subject relations. This resonates with what Marie Battiste and James Sa'ke'j Youngblood Henderson (2000/2012, pp. 66–68) have noted about cultural heritage and traditional knowledge. First, the Indigenous conception of human and nonhuman individuals includes bearing reciprocal responsibilities for their relationships in the ecosystem. Second, knowledge is transmitted only to persons who are spiritually prepared for the personal responsibility of interacting in human–nonhuman relationships. Third, this knowledge is transmitted among kinfolk and the people. Fourth, knowledge can be shared in reciprocal terms, but it cannot be alienated from the territory. Fifth, misuse of knowledge would cause disasters in the ecosystems and between humans.

In my collaborations with archaeologists and multidisciplinary research teams, I have aimed at bringing local Indigenous perspectives on cultural heritage in a participative perspective into my studies on Southwestern precolonial history. In this region, monumental geometric earthwork structures are situated dating from 3,000 years ago, and they were still used in the 14th century. Among the over 500 geometric earthworks are mainly circular and rectangular forms, but also other earthworks with ceremonial roads and paths often forming an essential part of their design. Some of them are fenced enclosures. They are abundant in the Upper Purus region on the Brazilian side, and most of them have been identified in deforested areas where today are cattle farms (Virtanen & Saunaluoma, 2017). This area is far from the Tumiã reserve that I have mostly described here.

Collaborative research with local Indigenous peoples has shown that the earthworks materialize the specific interactions between nonhuman and human subjects that are needed to understand the construction motives and processes of the monumental geometric forms carved in the land. In fact, the contemporary Apurinã consider the geometric earthworks as *kymyry*, their sacred places, and hence the Indigenous approaches to the sites show that they are not considered merely physical and material places. Our research group has shown that geometric earthworks in this region are an extraordinary materialization of Amazonian animated ontologies, their nonhuman protectors and life-givers, and they provide vital evidence of long-term Indigenous habitation and sustainable ways of living in the area (e.g. Virtanen & Saunaluoma, 2017). They are part of the Apurinã living biocultural heritage, and tell the history of inhabitation that was based on a different logic

than the settler-extractive agencies who arrived after the colonization of the Amazonian lands.

For the continuance of the Apurinã communities' relations to these earthworks and their biocultural heritage, it is crucial to integrate the Apurinã with the research and cultural heritage projects, even if we cannot prove the exact connections between the precolonial societies who constructed the sites and the contemporary Indigenous populations. Today, however, much of this archaeological evidence of an Indigenous precolonial past outside the Apurinã lands has been destroyed by farmers and agribusiness, and the local heritage agencies lack funds for effective control. New roads cut several earthwork structures outside Indigenous areas. As a contra initiative, archaeologists have managed to include the geometric earthworks in Brazil on UNESCO's tentative list of the world's cultural heritage sites, with the hope that more light can be shed on the Indigenous cultural heritage, and restrictions placed on the uncontrolled economic use on the earthwork sites.

In fact, in the Apurinã communities living in the Upper part of River Purus along the federal highway BR-317, and where the earthworks have been mostly identified, there are already several generations who have weakly been able to learn their biocultural heritage as in other territories. Contrary to the Tumiã reserve in Central Purus, which is forested and where traditional livelihoods and governance system are strong, the territories next to the highway have been impacted by deforestation and cattle farms. Therefore, the community has suggested for our collaborative future project to organize workshops within the community, in which especially the younger generation could learn orally about these sites.

Because of ambivalent potency of sacred sites, Apurinã elders underline that they should not be documented by other means in detail, even by the community. Their registration is considered in the communities to be a risky business due to their ambivalence, as the protecting powers may also turn against the people and thus harm their well-being. A similar view on sacred places is shared by several Indigenous people. The protective oral registration is however needed in community's terms, as Deborah McGregor (2004, pp. 398–401) has pointed out that the documentation of Indigenous traditional ecological knowledge can be a decolonizing process if Indigenous people themselves are protected, as well as their research methods and ways of living, instead of top-down structures set by outsiders being imposed upon them. However, based on my own experiences, individual research projects are limited in what they can succeed in doing about Indigenous cultural heritage and territorial protection. International and national Indigenous laws, property rights, and human rights frameworks will meantime also be implemented.

Legal framework protecting Indigenous biocultural heritage—beyond the human?

Until today, in order to protect their biocultural heritage, including their historical and sacred sites, the Apurinã have

primarily argued for their land rights to their ancestral territories according to Brazilian law. This is still their strategy as several territories were demarcated including only a part of the ancestral land. Currently, there is in fact an official process to extend the reservation of the Tumiã reserve in the National Foundation of Indian (Funai), as the lower parts of this tributary stayed outside the limits.

Brazil's Constitution of 1988 guarantees Indigenous peoples' land rights and their rights to live according to traditional life styles. However, any territorial claim has to be proven by a state-led study and the final demarcation process can take decades. Ultimately, the state has the responsibility to protect the demarcated lands. As has been argued by Indigenous organizations, however, this protection has not been fully integrated into development and economic projects planned and executed in the Amazon area, and they should be negotiated according to the International Labour Organisation (ILO) 169 convention and by drawing from Free, Prior and Informed Consent (FPIC) (see, for example, *Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica* (Coordinator of Indigenous Organizations in the Amazon Basin -COICA, 2019). This has been the case among the Apurinã who live in the reserves next to the federal highway BR-317 (Apurinã, 2019). Furthermore, as we have seen, the type of biocultural heritage of Apurinã, which is also protected by the UNDRIP 2007, the UNESCO 2003 Convention on Intangible Heritage, conventions by the WIPO, and Convention on Biological Diversity 1992, requires protection of territorial rights.

In the Apurinã territories and region, few activities have been organized at the local level by cultural heritage agencies and authorities, and there is a lack of funding for these kinds of activities. Information on international and national legal tools that protect material and immaterial cultural heritage, including environmental knowledge, rarely reach Amazonian Indigenous communities. Indigenous spokespeople in Amazonia have already made efforts to take the knowledge of different cultural projects to their lands, even if their capacitation courses offering this knowledge are rare. Meantime, the Brazilian state, through its cultural heritage agency, IPHAN, has started to promote cultural heritage education for and among the dominant society, especially through archaeological projects. In some cases, it has taken constructive steps in order to include different views of history and of valuing Indigenous perspectives. However, such events are rarely elaborated together with Indigenous communities (cf. Guillaud et al., 2016).

Furthermore, the Faro Convention—Convention on the Value of Cultural Heritage for Society (2005)—notes the importance of the cultural heritage for communities themselves. Therefore, local heritage agencies should also create strategies that leave enough space for the community to negotiate internally on what is shared and explained to outsiders and which aspects of cultural heritage can be addressed only internally. This also requires inclusion of restricted safe spaces as well as translations to Indigenous languages. From this process, taking into account the nonhumans, such decisions can arise that support Indigenous governance structures. In traditional Apurinã

governance, human–environment relationality is taken into account by *kiumanetxi* (elders), *mỹtyty* (shamans), and leaders (*awĩte*), who know how to guide village members to behave in a proper way when addressing the elements that are most in need of being protected. Such connections are crucial for Indigenous identity-building and future-making, and incorporate nonhumans' pasts, presents, and futures.

Similarly, Dominique Gallois (2008) has underlined that Indigenous communities should be included in the selection, registration, and documentation of their cultural heritage, so that their own understanding of what cultural heritage means is respected. On the contrary, the earthworks extend over a very large area and because of their ontological status, their boundaries are difficult to define, and hence the Apurinã biocultural landscape should be protected as whole. And ultimately, despite the difficulty of defining the borders of what should be protected and registered in relation to biocultural heritage, the starting point is still the traditional ancestral land.

A way forward

The Apurinã biocultural heritage should be understood relationally, in the context of long-standing lived experiences about specific relationships with the land and memorizing the ancestors' actions, practices, and knowledge. Amazonian anthropogenic forests and historical places in particular hold power and knowledge, indicating ways of managing the land and interacting with different subjectivities that need to be transmitted to future generations.

Apurinã biocultural landscapes are not only “the canvas where mutually dependent cultural and biological values and practices are intertwined” (Hiemstra et al., 2014, p. 25), as has been understood in the discussions on the biocultural heritage, but are embodied, sensed, and lived by and in Apurinã corporeality. The Amazonian cultural heritage is not only produced by humans; it is also co-produced with nonhumans through interactions and avoidances. All these things are materialized in various cultural heritage forms, such as songs, paintings, designs, craftwork, and so forth, and these forms exceed categorizations and divisions into intangible and tangible heritages. Human–environment interactions are the key to understanding the ontological formation of the Amazonian Indigenous cultural heritage.

Furthermore, the ontological aspects of biocultural heritage are embedded in a specific notion of temporality. To the Apurinã, nonhuman entities are not limited to the present, as ancestors still shape the well-being of the present generation, just as the present generation affects ancestors. Amazonian Indigenous biocultural landscapes are in fact co-produced in constantly remodified relations between present humans and nonhumans of different times. Even if the co-production and co-protection takes new forms, the Apurinã draw from mutually beneficial exchanges and reciprocity between their communities and their close nonhuman actors. Nonhuman actors play an active role and are thought of in a temporal framework that still contributes to the relationships that go to make up peoples and their biocultural heritage.

In this article, it has been shown how the Apurinã way of protecting biocultural heritage is based on nonverbal and

verbal communication, expressed in detail in Indigenous languages and codes, and acts of restricting the interaction with the agencies of the land, animals, plants, and other nonhuman entities that have their own histories. It greatly draws from secrecy and sharing knowledge internally. The former aspect occurs by reinvigorating the stories of specific places and nonhuman agencies, intertwined with personal and communal histories. Especially the physical presence in the vicinity of sacred and historical places triggers remembering, and the places themselves mediate memories (see Erll & Rigney, 2009). The personified entities of the environment and historical places also involve aesthetics and emotions that activate ecological memory (Nazare, 2006). Here ecological memory does not only refer to memory of biological species, it also involves ancestor spirits and other nonhuman entities, such as owner spirits whose lives cannot be restricted to linear time.

Consequently, the (bio)cultural heritage cannot be owned or protected by humans only. In this article, I have also shown how nonhumans are given very limited space in legal frameworks concerning the protection of the Indigenous cultural heritage. On the contrary, their fuller inclusion can be guaranteed if the Indigenous cultural heritage is considered through a holistic approach, taking for instance land rights and biodiversity protection as a basis for cultural heritage protection. Due to the role of nonhumans, the protection of the biocultural heritage cannot be separated from the land. Like in many other places, in Amazonia, implementation of the Indigenous cultural heritage legal framework is especially related to land issues.

Finally, although this study has shed light on the type of ownership of Amazonian biocultural heritage which goes beyond the human, I would also like to point out that humans have a special role in cherishing reciprocal relations with other entities, especially the Indigenous inhabitants of the lands, and their experienced knowledge holders, old and young, who give advice and make decisions. Therefore, external support through cultural heritage projects should acknowledge Indigenous traditional governance structures. The state and other agencies' cultural heritage projects should be constructed together with Indigenous communities, truly incorporating their ideas and perspectives, so that they operate at local levels. Consequently, cultural heritage projects should respect ethical guidelines, involving full, free, prior, and informed consent, and allowing protection and promotion of Indigenous biocultural heritage in Indigenous terms. That means collaboration and dialogue between different actors, leading to a full and effective participation of Indigenous peoples and local participation.

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Notes

1. Indigenous peoples have the right to maintain, control, protect, and develop their cultural heritage, traditional knowledge, and traditional cultural expressions, as well as the manifestations of their sciences, technologies, and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games, and visual and performing arts. They also have the right to maintain, control, protect, and develop their intellectual property, their cultural heritage, traditional knowledge, and traditional cultural expressions.
2. The Berne Convention for the Protection of Literary and Artistic Works (1886, art. 15); the WIPO Performances and Phonograms Treaty (1996, arts. 2 and 33); and the Beijing Treaty on Audiovisual Performances (2012).
3. "Each contracting Party shall, as far as possible and as appropriate: Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of Indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices."
4. I have also been collaborating with another Arawak-speaking group, the Manchineri, and the Panoan-speaking Huni Kuin. My studies have looked at time- and place-specific ways of knowing, Indigenous education, leadership, mobility, the transformation, and continuity of the Indigenous cultural heritage, and additionally I have participated in the production of books for Indigenous schools. My first encounters with Brazilian Indigenous people occurred in 2000 through the demonstrations in Brazil where they aimed at reminding that the colonizers did not come to an empty land, and it was time to recognize the 500 years of domination of the Indigenous and Black populations. This led me to study Indigenous histories, present and future in Indigenous terms and perspectives, and to try to do justice to them by academic means.
5. Here I do not have space to elaborate on traditional forest management practices. They will be a topic for future publication in a preparation.
6. In the past, the Apurinã were mobile and used to bury their deceased in differing places in their travels. Separated communal cemeteries were founded after the arrival of

Christianity. Yet, the shamans have often been buried in topographically specific places or otherwise specific locations.

7. Charged nonhuman entities and places can only pass on their power through dedication, interaction, and presence, and eventually through shamanic stones, to shaman novices. The shamanic stones received from trees, animals, or certain places are the necessary tools for shamans to work, as their powers are embedded in them.
8. Yet, many settler colonizers who stayed living as river dwellers and rubber tappers adopted Indigenous view of nonhuman owners of places. However, similar conflicts between the views of private and collective property have been experienced globally.
9. See Virtanen and Saunaluoma (2017) for detailed discussion.

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