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LANDSCAPE AND ARCHITECTURE: YAWANAWÁ DESIGN LESSONS FROM THE BRAZILIAN AMAZON FOREST

PAISAJE Y ARQUITECTURA: LECCIONES
DE DISEÑO YAWANAWÁ DE LA FLORESTA
AMAZÓNICA BRASILEÑA

PAISAGEM E ARQUITETURA: LIÇÕES DE DESIGN
YAWANAWÁ DA FLORESTA AMAZÔNICA
BRASILEIRA



Figure 0. Dwellings in Mutum, which preserve ancestral material technologies and exhibit formal mutations. Source: Photographs by the author, 2016.

Research funded by the National Council of Scientific and Technological Development (CNPq), Brazil, N° 142236/2015-2.

RESUMEN

El presente artículo tiene como objetivo, observar las prácticas de diseño espaciales de la población indígena Yawanawá, que habita en la Tierra Indígena Río Gregorio, localizada en la Floresta Amazónica brasileña. La intención es reflexionar, en colaboración con este pueblo, sobre enfoques que puedan enriquecer la investigación de sus conocimientos espaciales, contribuyendo así, a la consolidación de los saberes amerindios en el ámbito académico de la arquitectura y el diseño. La metodología de observación participante, permitió la inmersión en las narrativas Yawanawá que, rescatan su papel ancestral en la configuración arquitectónica y paisajística del territorio. Mediante la elaboración de una investigación visual fotográfica, se buscó ampliar voces y sentidos, en estratos de tiempos coexistentes, articulando las imágenes a las concepciones arquitectónicas amerindias que sobreviven al atropello colonial. En las conclusiones se destaca las lecciones que, los Yawanawá expresan y manifiestan, al construir espacios de resistencia de manera poética, simbólica y cotidiana donde las estructuras de poder urbanas edificadas y que atraviesan su territorio, fueron y son resignificadas para ensayar otras formas de habitar en la floresta.

Palabras clave: arquitectura indígena, diseño arquitectónico, diseño del paisaje, patrimonio histórico, pueblos indígenas

ABSTRACT

The purpose of this article is to observe the spatial design practices of the Yawanawá indigenous population that inhabits the Rio Gregorio Indigenous Land, located in the Brazilian Amazon Forest. In collaboration with this community, the intention is to reflect on approaches that can enrich the research of their spatial knowledge, thereby contributing to the consolidation of Amerindian knowledge in the academic field of architecture and design. The participant observation methodology allowed an immersion into Yawanawá narratives that rescue their ancestral role in the architectural and landscape configuration of the territory. Through elaborating a photographic visual investigation, it is sought to expand voices and meanings in strata of coexisting times, articulating the images to the Amerindian architectural conceptions that survived colonial abuse. In the conclusions, the lessons that the Yawanawá express and manifest are highlighted when building spaces of resistance in a poetic, symbolic, and daily way where the urban power structures constructed and/or that cross their territory were and are re-signified to test other ways of living in the forest.

Keywords: indigenous architecture, architectural design, landscape design, historical heritage, indigenous people

RESUMO

O objetivo deste artigo é observar as práticas de design espacial da população indígena Yawanawá que vive na Terra Indígena Rio Gregório, localizada na Floresta Amazônica brasileira. A intenção é refletir, em colaboração com esse povo, sobre abordagens que possam enriquecer a investigação de seus conhecimentos espaciais, contribuindo assim para a consolidação dos saberes ameríndios no campo acadêmico da arquitetura e do design. A metodologia de observação participante permitiu a imersão nas narrativas dos Yawanawá, que destacam seu papel ancestral na configuração arquitetônica e paisagística do território. Por meio da elaboração de uma investigação visual fotográfica, buscaram-se ampliar vozes e significados, em camadas de tempos coexistentes, articulando as imagens às concepções arquitetônicas ameríndias que sobrevivem ao ultraje colonial. As conclusões destacam as lições que os Yawanawá expressam e manifestam ao construir espaços de resistência de forma poética, simbólica e cotidiana, onde as estruturas de poder urbano edificadas e que atravessam seu território foram e são resignificadas para experimentar outras formas de habitar a floresta.

Palavras-chave: arquitetura indígena, projeto arquitetônico, projeto paisagístico, patrimônio histórico, povos indígenas.

INTRODUCTION

THE DESIGN OF THE FORESTS: ARCHITECTURAL LANDSCAPES

Indigenous lands cover 11.6% of the Brazilian territory, which translates into an area of 991,498 km², *protected* by law, to conserve the ways of living of the country's Amerindian societies (IBGE, 2002). However, they face threats such as invasion by agricultural activities, mineral exploitation, timber extraction, road building, and hydroelectric plants (IBGE, 2002). According to official data, these attacks have had a profound impact on Amerindian sociability¹, even leading to their extermination and significantly accelerating the environmental degradation of the territories, which, in turn, has compromised the physical and epistemic survival of the indigenous population.

In addition to facing the appropriation and exploration of their natural resources, they have been affected by diverse forms of colonial extraction. These operate not only in expropriating natural resources but also in images, symbols, and representations. According to the UN report on the *State of Indigenous Peoples in the World* (UN, 2021), indigenous peoples, amid their multiple threats, play a crucial role in preserving ecosystems, home to approximately 80% of the planet's biodiversity. However, the most urgent global challenges, such as climate change, are ignored by allowing continuous environmental degradation, gradual or otherwise, and the loss of original ways of living.

The analysis shows that the environmental crisis and the defense of indigenous territories are part of the landscape debate because it is urgent to discuss the interventions allowed in the space and the architectural operations that would collaborate in the design of instruments to protect threatened territories and knowledge. There are diverse points of view and historical constructs for the definition of landscape. This work is put together from the perspective of *historical ecology* (Balée, 2006; Crumley, 2007), where the concept is built in an operational sense, "[the] landscapes are encounters of people and places whose stories are imprinted on matter, including living matter" (Balée, 2008, p. 11). From this perspective, Balée (2008) defends the *indigeneity* associated with the design of landscapes; in other words, certain landscapes are living proof and reveal specific design techniques linked to *indigenous* life practices.

In the Amazonian landscape, scientific evidence reveals transformations caused by Amerindian activities before the European arrival. These designs, confirmed by recent archaeological research (Heckenberger, Petersen & Neves, 1999; Heckenberger et al., 2008), mainly consist of large earth manipulations, extensive in their designs and roles. These constructions had everyday uses and roles related to fish exploration, drinking water provision, and watercourse design, among others, but they are also associated with multiple cultural or symbolic interpretations. In short, this forest is an archaeological landscape, and its *architectural* design was produced in

¹ The term Amerindians defines the indigenous peoples of the Americas, given the similarities among the indigenous societies of North, Central, and South America. Source: Povos Indígenas No Brasil, 2023.

the pre-overseas expansion world by different Amerindian cultures, the ancestors of contemporary indigenous peoples (Balée, 2008).

In the field of architecture and urbanism, voices attentive to recent research in other fields – such as archaeology, historical ecology, and anthropology – are rising up to legitimize Amerindian spatial conceptions and practices, urging the overcoming of limited visions of the Amazon, historically reduced as a remote, untouched, or unoccupied space. Until now, architects have focused mostly on studying traditional architectural objects – typological, constructive, material, and formal systems – and have documented these constructions within the notion of the *vernacular or popular architecture* (Schlee, 2012). However, in some ways, these generalist conceptions reduce local knowledge's richness and specificity. It is about “being attentive” so as not to let their techniques and spatial intelligence, still alive but in constant threat, extinguish the landscapes built by the Amerindian cultures. (Balée, 2008).

Contemplation onsite generated the need to observe and recognize the design practices inscribed in the Amazonian landscape. These are linked to extended interpretations of architecture, where its relationship with the interspecies production of the territory and the landscape is inherent. In this incipient architectural debate, it is urgent to elaborate other vocabularies and conceptual tools that allow formulating strategies for the care, reproduction, and listening of the landscape articulated to the architectural agenda.

The hypothesis posits that Yawanawá spatial, architectural, geographical, artistic, and ecological knowledge (Jecupé, 1998; Krenak, 2022; Xakriabá, 2020; Baniwa, 2021) survived colonial violence and is a powerful instrument for the production of ideas and thoughts that point to other possible worlds and open ways for us to dream of futuristic ways of living.

This article results from research on the urban transformation dynamics in the Brazilian Amazon Forest that is crystallized in the Gregorio River Indigenous Land, TIRG (in Portuguese) **2** (Figure 1). The Yawanawa **3**, who live in the TIRG, despite the cultural impact they have suffered since contact with non-indigenous people, maintain and claim their traditional ancestral knowledge, among which is the design of the landscape they cohabit. The introduction of urban logics in the territory, have occurred gradually and originate in the mid-nineteenth century. Subsequently, the invasion of their lands by non-indigenous groups was the origin of the destabilization of their original ways of life. With the arrival of foreign missionaries, ancestral rituals and cultural practices were extinguished (Vinnya, Pinedo & Teixeira, 2007; Yawanawá, 2017). In parallel, the rubber explorers' invasion impacted the productive, constructive, and socio-spatial systems. Both invasive dynamics caused the fragmentation, transformation, and erasure of their routines, language, and original way of living for decades (Vinnya et al., 2007; Yawanawá, 2017).

2 The Gregorio River Indigenous Land (TIRG) was demarcated in 1983, with approximately 187,400 inhabitants and a perimeter of 239km. Hunting and fishing are two of its main traditional economic activities, although, at present, some of them participate in urban work dynamics related to private companies or public institutions. The Siasi/Sesai showed that 813 Yawanawá live in Acre, Brazil. Source: Indigenous Health Information System, Siasi/Sesai, (2014).

3 The word Yawanawa comprises yawa, the generic name of the queixadas, a mammal commonly known as a wild pig, and Nawa, which refers to the village. The Yawanawá call themselves the people of the queixadas, symbolizing their form of social organization: “As the queixadas, we always walk together” (Camargo-Tavares, 2013, p.30).

The text seeks to expand the visual and written documents that make visible the diversity of Yawanawa spatial design practices such as landscape, architectural, infrastructural, and artistic practices, contributing to visualizing perspectives of Amerindian architecture. The methodological approach is qualitative, with a visual documentary design supported by oral stories and an architectural, archaeological, and anthropological bibliographic review, including sources of the Yawanawá people.

The first part of the text briefly addresses the concepts of inhabiting the forest from the Amerindian perspective (Krenak, 2022; Xakriabá, 2020; Yawanawá, 2017) and also from classical sources, such as Bachelard (1957) and Heidegger (1951), looking for articulations or dissonances between these perspectives. Subsequently, the specific case of the production of architecture and landscapes in the Amazon Forest is described based on the fieldwork in the Gregorio River Indigenous Land, TIRG. It reflects on how the articulation between the Amerindians' ways of inhabiting and resisting is translated into poetic forms of *living in the forest*. The text finally concludes with reflections on the lessons expressed by the Yawanawá when designing spaces of resistance, where the visible and invisible power infrastructures that cross their territory are re-signified to formulate other ways of living.

METHOD

The start of a research journey is proposed based on a dialogue with the Yawanawá in 2016, where they outlined their spatial memories and historical narratives. Concerning the problem, the analysis assumes an exploratory essayistic character, which seeks to generate new interpretative possibilities and conceptual approaches relating to epistemic debates, historicities, and socio-territorial processes. The methods and techniques applied in the research have been the documentary analysis of texts and photographs, in addition to participant observation.

Direct and participant observation has taken place in the following areas:

- (i) at the TIRG in Mutum village in 2016⁴; and
- (ii) at the meetings held with members of the Mutum village in Rio de Janeiro in 2018 and 2019, respectively.

⁴ The field research was carried out between July and August 2016, arriving at the Mutum village on June 29th, 2016. All the villages were visited, including Escondido, Tibúrcio, and Sete Estrelas. On August 18th and 19th, Amparo village was visited, and on the 20th, the return began.

During the participant observation, photographic records were made that were organized and treated. This territorial investigation takes special care not to extinguish the social violence involved in the planetary urbanization processes; namely, it is essential to visualize the paved roads, the material transformations, and other physical expressions that appear in the territory to visualize the ways of life, which are being threatened by the abuse of colonial contact. The visual records are documents that reveal complex processes of dispossession and resistance in the analyzed areas.

PERSPECTIVES OF LIVING IN THE FOREST

The historical relationship between living, landscape, and territory goes back to the conception of *terra nullius*, a concept created by Europeans to name the lands and societies of the New World and elaborated to define the territories considered as uninhabited (Balée, 2008). This conception, which is kept alive in the narrative of the natural landscape or virgin forest, participates in the construction of the colonial project, which portends the fragmentation and erasure of Amerindian societies and territories. This link persists in aesthetic debates, such as literature or philosophy, where other narratives are formulated but somehow perpetuate the uninhabited forest's paradigm.

For Gaston Bachelard (1957), *the forest is a transcendental spatial figure that illustrates the immensity*, a philosophical category to explore the *poetics of space*. In this context, Bachelard examined “close up what the immensity of the forest was” and articulated different authors to this end. “The poet feels this immovable immensity of the ancient forest” (Bachelard, 1957, p. 165). This phenomenological study reveals how limited visions of pre-existing design in some forests still support certain aesthetic narratives.

A proximate perspective – the forest as a space of thought that helps to reformulate ways of living - underlies Martin Heidegger's lecture (1951), *To build, to inhabit, to think*. Heidegger (1951), in this manifesto, puts forward his critical vision of the urban constructive forms of the postwar; for its inability to create roots and complicity with the environment. In addition, he argued that inhabiting is linked to the way of living on Earth. In this sense, cultivating and caring for the earth (Heidegger, 1951) is an inherent part of inhabiting. Therefore, when inhabiting in its original meaning, the human being cares for and cultivates the earth. Therefore, this *Heideggerian* postulate started a contemporary debate on the homogenization of urban life and the loss of agrarian or artisanal ways of life.

This example is still valid, questioning how inhabiting, caring for, and cultivating the planet can be understood globally, promoting resistance and the restorations of silenced social and cultural diversities. To expand this listening, it is necessary to inhabit places hinged between the different existing worlds and to transcend the limits of the Western perspective. It is not very difficult to assume that the homogeneous design of urban life “has failed and fails in mediating relations between human-urban and other beings and non-human entities, including the e(E)arth” (Cançado et al., 2022, p.237). Moreover, inhabiting or living on the earth does not equate to urbanizing, planning, or asphaltting (Cançado et al., 2022).

From this critical perspective, the indigenous thinker Ailton Krenak (2022) highlights that urban designs interrupt life flows and consume the body of the E(e)arth. Krenak (2022) proposes carefully observing the ways of living in the forest, as Bachelard suggests (1957), in search of its poetic

potential. Krenak (2022), from the Amerindian perspective, conceives *the forest* as the place where beings cooperate to coexist and cohabit the landscape, and that is designed between humans and non-humans. Could this conception of the forest help us imagine futures where to evoke other poetic forms of life? For Krenak (2022), architects and urban planners can look to forests for ways of design to reconcile with the Earth, (re)learn grammar, break with outdated urban conceptions, and “[...] summon the forest to enter, to cross the walls, to flourish in the city –flowering-city. This is poetic. It evokes *the poetics of life* to break these walls and make some flower sprout from inside the hard stone” (Krenak, 2022, p. 228).

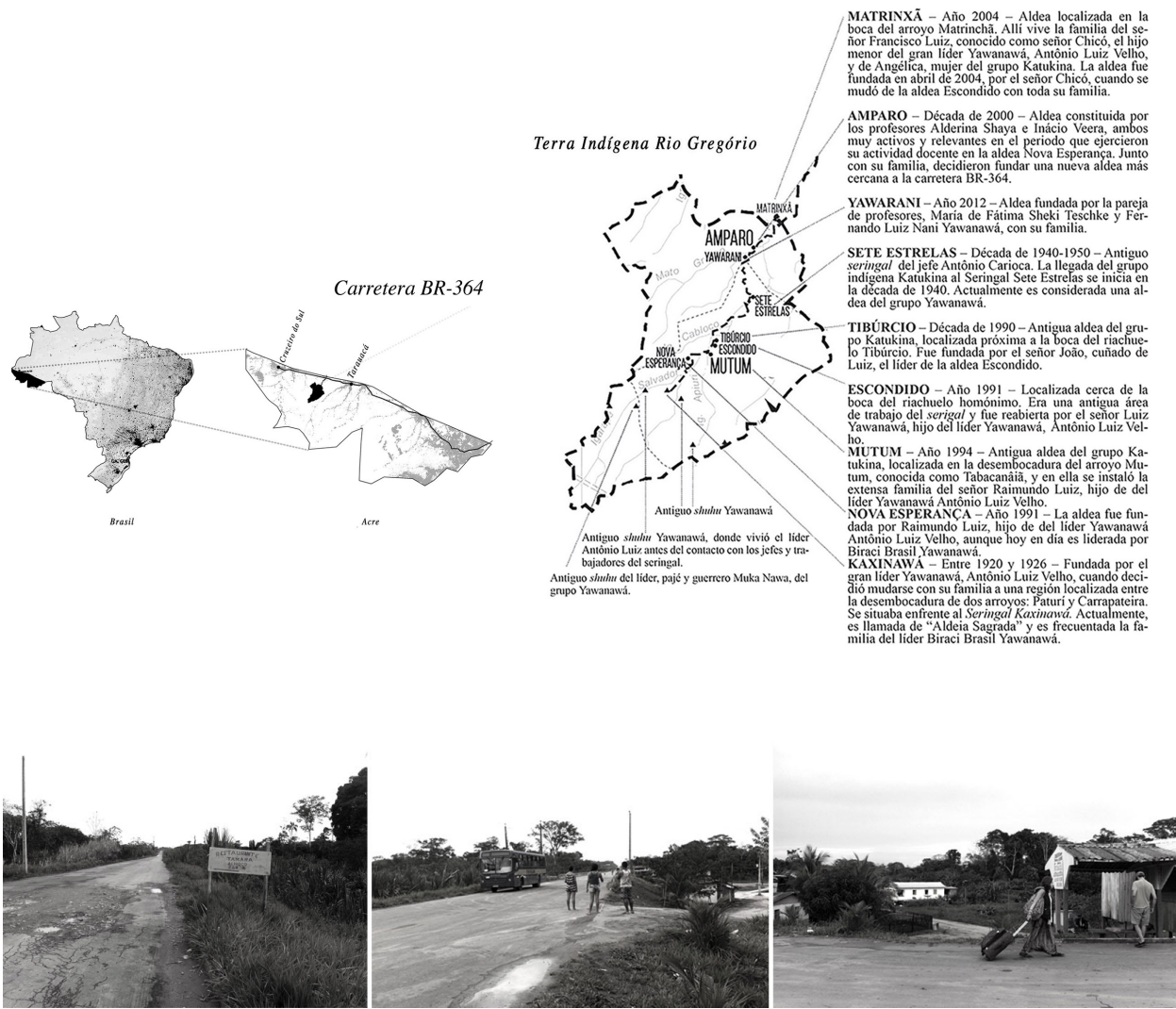
From this approach, the forests reveal themselves as places where the poetics of life are sustained and show ways to restore the conception of inhabiting the Earth towards an “ancestral future” (Krenak, 2023). In the Amazonian lands, indigenous peoples, by practicing a theory of generalized cultivation, believe that other beings contribute to organizing the land and making it more productive (Cunha, 2023), “the indigenous peoples undoubtedly transformed the forest more favorably to human life, but they did not colonize it” (Cunha, 2023). According to the leader Francisco Panahãi, the Yawanawá: “always sought a balance between using resources and thinking about tomorrow [...], we were very careful with the land” (Yawanawá, 2017, p.25). Raimundo Sales, son of the last great Yawanawá leader, reveals: “My father already had in his blood the presentiment of the causes that the world would embrace, the cause of the forest, of the environment” (Yawanawá, 2017, p.43). Both testimonies reflect the deep and central character of the territorial Yawanawá design in its forest environment.

These Amerindian sapiences are “present and active, still today, being dynamic and marked by processes of resignification that will define our relationship with the body-territory memories in the future of those who will be still to arrive” (Xakriabá, 2020, p.111). It is about forging links between the city and the forest, where the living design forms in the Amazon forest can open paths of thought for constructing other worlds.

CASE
STUDY

DESIGN FORMS OF YAWANAWÁ LIVING

The Gregorio River Indigenous Land, TIRG, is affected by global urbanization dynamics, although this is not evident to the naked eye (Figure 1). Field research revealed that this place is deeply interconnected with the total urbanization of society process (Lefebvre, 1970; Brenner & Schmid, 2012). There is a set of economic, political, and social links produced between the Yawanawá territory and different agents of the global urban logic throughout recent decades, which repositioned the forms of sociability, alliance, (re)existence, and (re)invention in the



Amazon Forest (Mendo, 2018). In addition to the physical constructions, such as the BR-364 highway (Figure 2) and other urban extensions that have crystallized the territory, there is an *invisible network of connections*. It is an infrastructure designed for the control of nature and its plundering, articulated by different devices: communication satellites for the control of forest tree masses, interpretation centers of nature as a product, regulations, and entities that transform this environmental wealth into *environmental services*, of the international market and finally, the financial systems, which market *forest assets on a planetary scale*. A whole *invisible* interscalar network that supports this infrastructure is designed to incorporate the forest into the planetary urban rhythms (Mendo, 2018).

LANDSCAPE DESIGN PRACTICES

Despite the sophisticated devices of silencing the Amerindian culture and knowledge, the Yawanawá have maintained the territorial design of the Acreana Forest. In different sources (Aquino & Iglesias, 1994; Ribeiro,

Figure 1. Location map of the TIRG. Source: Preparation by the Author, 2023

Figure 2. The BR-364 highway. Source: Photographs by the author, 2016.



Figure 3. Landscape design in Mutum village: Multiple bridges connect a designed network of forest roads and water bodies, expressing forest management through a system of environmental gradients and biome production. Source: Photographs by the author, 2016.

2005; Vinnya et al., 2007), some accounts describe, even at the time of the rubber plantation, how the Yawanawá maintained their practices of designing the Amazonian landscape: they designed the rubber extraction roads, built the taxiways, the placements, the docks, the branches, carried out the circulation of the raw material, provided food, etc. Archaeological investigations confirm the existence of an infrastructure material built in the Amazon region by the Amerindian peoples, evidencing vestiges of a network of roads for communication, circulation, and regional occupation (Heckenberger et al., 1999; Heckenberger et al., 2008).

In the Gregorio River Indigenous Land, TIRG, the material conformations observed in 2016, such as bridges, dams, roads, paths, and plantations, reflect and make visible the territorial designs of the Yawanawá (Figure 3). This infrastructural tradition is expressed in some stories, where the Yawanawá remember their authorship in the design

of the rubber routes, building “big bridges for the convoy to pass” (Vinnya et al., 2007, p. 36). In Mutum, the socio-spatial transformation practices produced by the Yawanawá can be observed in the design and production of environments: water bodies, their agricultural systems, gardens, and orchards, among others. This designed landscape reveals a system of different gradients and intensities in managing biomes, where mature forests, domesticated forests, orchards/gardens, heaths, scrublands, and human settlements appear. In short, the perception that was obtained is that the *architectural* landscape made by the Yawanawá is recognized as a large-scale urban heritage, where the geographical, technical, and material knowledge of the Yawanawá has been activated and transmitted in the project of recomposing their spatialities.

CONTEMPORARY HOUSING DESIGN PRACTICES

In the past, the Yawanawá built large collective dwellings, which, over the decades of contact with the rubber vendors, saw modifications, such as the influence on the design of the rectangular floor (Carid Naveira, 1999; Vinnya et al., 2007). Despite this, ancestral construction technologies and materials have been maintained, evidenced in the vegetation roofs and the fastening and structural tying systems. However, at present, the Yawanawá do not intend to formally rebuild the ancestral collective habitat, the *shuhu*⁵, and the architectural living knowledge is perceived with attention, which implies know-how to build, invent, and open paths for other possible architectures (Figure 4). This reinvention process is expressed in recently built homes, where the innovative design establishes evident formal and functional transformations of original spatialities (Mendo, 2022).

In recent decades, some Yawanawá villages have incorporated industrialized materials, such as metal or fiber cement sheets, affecting the forest's climatic comfort and environmental quality. In 2016, in a conversation with the political leader of the Mutum village, Mariazinha Yawanawá, she expressed the urgency of consolidating certain Amerindian constructive technical knowledge, which would allow self-construction and self-management of spaces. At that time, the group was actively testing and searching for a place of Yawanawá spatiality from the present.

In the resurgence and maintenance of its constructive design techniques, its resistance to the extinction of its ancestral constructive knowledge is expressed, but also the disagreement with the idea of spatial linear evolution of its architecture. There is an evident design exercise in this system of choices and decisions concerning the techniques maintained, incorporated, and re-signified in contemporaneity, as they express a living design in movement and are open to constant experimentation.

⁵ For more information on the *shuhu*, Source: “Entre a dança e a arquitetura das mulheres Yawanawá: práticas espaciais indígenas na contemporaneidade” (Mendo, 2022).



Figure 4. Dwellings in Mutum, which preserve ancestral material technologies and exhibit formal mutations. Source: Photographs by the author, 2016.



Figure 5. From top to bottom:
Design of domestic spaces and
ceramic kitchen, fruit ripening,
roof maintenance, and collective
fishing in the Amparo village.
Source: Photographs by the
author, 2016.

EVERYDAY DESIGN PRACTICES

Faced with the oppression of the colonial period, daily practices of supporting their ways of life emerged (Figure 5), such as collective fishing with ancestral techniques, the elaboration of woven baskets, the upkeep of roofs and sewing techniques, the manual construction of ceramic stoves and spatial systems to accelerate the ripening of bananas. These cultural and environmental practices keep Yawanawa technological knowledge alive and have evolved in use, form, and function since their original customs (Vinnya et al., 2007; Yawanawa, 2017).

So, the study shows that the Mutum village has an extensive network of architecture designed for everyday situations, such as bathing in the river or washing clothes in the stream, maintaining the heritage of traditional buildings for productive activities such as hunting, fishing, or harvesting.



Figure 6. Artistic design practices. From top to bottom: Design of bracelets, ornaments made with floral materials, and drying of the clothes used for collective celebrations or mariris. Source: Photographs by the author, 2016.

Since the 1990s, the Yawanawá have created a variety of ornamental elements and artistic manifestations, led mainly by a group of women (Vinnya et al., 2007). This movement includes recomposing objects, materials, and languages and formulating new designs and meanings, such as bracelets and necklaces made with beads (Mendo, 2022) (Figure 6). While expanding and transforming graphic, formal, and material design repertoires, they remain sensitive to cultural tradition and the care of their ecosystems. These domestic cultural designs blur the line between architecture and landscape, manifesting an authentic Yawanawa biocultural heritage and blurring the distinction established by the Western perspective between culture and nature.

DESIGN PRACTICES OF COLLECTIVE SPACES

After expelling the rubber vendors and loggers from their territory, the Yawanawá group began the recovery of spiritual and festive practices, such as



Figure 7. From top to bottom:
Tapiri in Mutum, construction
on the Mutum stream, tapiri in
Amparo, tapiri in Escondido, and
construction on the Gregorio
River. Source: Photographs by
the author, 2016.

the *mariris*. According to Raimundo Sales Yawanawá (2017), in that context, the question arose, “Why don’t you do it like you did in the past? We played like this and sang like that...” (Yawanawá, 2017, p. 3). This initiative was expanded, attracting urban visitors interested in culture and artistic manifestations. Between 2012 and 2013, the proposal arose to create the Center of Ceremonies and Healings in Mutum to receive visitors to the Forest. The Center, built with indigenous materials, has different collective and individual spaces (Yawanawá, 2017; Mendo, 2018) (Figure 7).

In Mutum’s Center, the wood used to raise the structures was extracted from the surrounding forest, natural fiber ties made the knots and structural connections, and the roofs were covered with palms. In these constructions, the wood comes from the surrounding forest, and the knots and structural connections are made with vegetable fiber ties, while the roofs are made mainly with *coquero* palm leaves. The central space of this room is used to

perform ceremonies, building a circular space, covered but without walls, called *tapiri*. These are temporary structures with conical roofs that more evidently transmit ancestral structural, constructive, and formal systems. The *tapiris* observed in the villages visited have different sizes, geometries, and materials used for group activities, whether for political, economic, or internal festive organization, and recompose the concentric *spatialization* of the *Shuhu* and the collective dances.

It is possible to see that this spatial-formal dynamic can have several readings. Still, it mainly highlights the relationship between the spatial and even constructive collectivity, as they are built from group work, which evidences the resistance of the social values and mechanisms shared by the Yawanawá, in contrast to other external urban orders. In this way, the *tapiris* and other elements of collective use are architectural ensembles and spatial designs, where no boundaries are established with the environment, without barriers and walls; its design appeals to build links and gradual relationships with the various adjacent forest environments often also produced as part of the spatial ensemble.

FINAL
COMMENTS

With their cultural routines, the Yawanawá daily challenge the forms of spatial domination through complex political strategies of mutation and adaptation to the territorial dynamics of their living, rooted in their cosmology, and thus survive “in another world, a world of others, of their invaders” (Danowski & Viveiros de Castro, 2017). This cognitive arsenal manifests as a sensitive form of poetic living, inhabiting between worlds, where design forms that reinvent and recompose spatial practices are manifested for an *ancestral future*. Through spaces of symbolic, poetic, and everyday resistance, they reinterpret and re-signify the visible and invisible urban power infrastructures that cross their territory.

It was observed that the Yawanawá landscape, architectural, domestic, and daily spatialities materialize the re-composition of their spatiality. Therefore, these spatialities are not configured exclusively as symbols but as ways of being in the world together; of collective living, and of welcoming the space of multiplicity, allowing the poly-rationality of voices and dialogs. The design of large-scale forest management is presented as a lesson on the magnitude of transformations, the production of new biomes, and the conversion of forests, redefining the relationship between design and the environment and proposing a vision of coexistence and co-design between humans and non-humans, which covers the production of the landscape in an extensive and prolonged way over time.

Likewise, a conception of forest design without limits or barriers is revealed, that is, of diffuse transitions between environments with different gradients and intensities in their production and management, including the connection of these through extensive road networks and

water systems. Adaptability emerges as a key characteristic challenging traditional physical demarcation in landscape design. The capacity of open planning facilitates disinterested experimentation and aesthetic appreciation, allowing the adaptation to new ideas and favoring creativity in the field of architectural and landscape design. These lessons, which could be observed from the ways of life of the forest peoples, challenge the conventional conception of territory management, and its approach implies the design of techniques of alliance and cooperation between species.

The research reveals a vast knowledge perceived as urban, architectural, and biocultural heritage, which constitutes a subject of interdisciplinary study and documentation. It is about starting the construction of other grammatical bases, which involve unleashing places and establishing links with new interlocutors, making continuous displacements that allow redefining the locus of architectural knowledge production to advance in the multiplication of worlds. Since the climate crisis is rapidly advancing, the limited conditions of habitability on Earth, and urban ways of living are deteriorating, this research identifies the importance and urgency of *thinking, expanding, and learning with the design forms of the Amerindian cultures.*

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