

**IMPURE MONTAGES OF AN ARCHITECTURE CALLED FOREST**  
**MONTAJES IMPUROS DE UNA ARQUITECTURA CUYO NOMBRE ES FLORESTA**  
AYARA MENDO PEREZ

**Maria Ayara Mendo Pérez** is an Architect and Doctor in Urban and Regional Planning. She is an Adjunct Professor at the Faculty of Architecture and Urbanism at the Federal University of Rio de Janeiro (UFRJ), Brazil, and a researcher at the Laboratory of Urban Analysis and Digital Representation at the same institution. [ayara.mendo@fau.ufrj.br](mailto:ayara.mendo@fau.ufrj.br)

<http://lattes.cnpq.br/2630484276565132>

ARTICLE SUBMITTED ON AUGUST 15, 2022

How to quote this text: Mendo Perez, M. A., 2022. Impure Montages of an Architecture Called Forest. Translated from Spanish by Rowena Jameson. *VIRUS*, 25, December. [online]. Available at: <<http://www.nomads.usp.br/virus/papers/v25/656/656en.php>>. Accessed: dd Month yyyy.

## Abstract

The starting point for this article was a fieldwork project carried out in the Rio Gregorio Indigenous Land, located in the Amazonian Forest in Acre State, where a series of architectural projects were developed together with a group of Yawanawá women in 2016. The objective of this visual work, which recovers some fragments, sketches and photographs of the process, is to open an investigative and experimental debate that considers the knowledge of the Yawanawá group as active and influential. The idea is to show that their geographical, constructive, biological, artistic, cultural, political and ecological knowledge is a powerful instrument in the production of ideas and thoughts in the field of counter-hegemonic architecture. Thus, we propose a methodology for thinking and practicing together, which aims to de-hierarchize the classic relations of knowledge production. Through the elaboration of impure visual montages, we seek to amplify voices and memories in layers of coexisting times. This reflection focuses on manifesting that Amazonian Forest Architecture is the product of an Amerindian agenda, designed collectively and intergenerationally. Building land, nurturing soils, generating other species, producing botanical abundance and significance implies the action and production of a counter-hegemonic project, formulating the conditions of an Architecture called Forest.

**Keywords:** Acrean Amazonian Forest, Rio Gregorio Indigenous Land (RGIL), Yawanawá Architecture, Ancestral Knowledge

## 1 Introduction: The encounter with Yawanawá Contemporary Architecture

As a doctoral student in 2016, I came into contact with the linguist Livia Camargo Souza through the National Museum professor, Bruna Franchetto<sup>1</sup>. Livia was planning a trip to the Rio Gregorio Indigenous Land (RGIL)<sup>2</sup>, in the west of the North Region of Brazil, with the aim of documenting Yawanawá grammar, considered a threatened language<sup>3</sup>. With an interest in understanding the Amazonian processes of urban transformation, I accompanied Livia with the desire to empirically investigate the phenomena of extensive urbanization (Monte-Mór, 1989; Brenner; Schmid, 2012) that has had an impact on this Indigenous Land (RGIL) —figure 01. During the course of this field experience<sup>4</sup>, a direct dialogue was established with Yawanawá women, who live in connection with planetary urban rhythms and wish to (re)invent architecture in their territory.

---

<sup>1</sup> Bruna Franchetto is a Full Professor at the Federal University of Rio de Janeiro (UFRJ), and the Postgraduate Program in Social Anthropology and Linguistics of the National Museum.

<sup>2</sup> The Rio Gregorio Indigenous Land was demarcated in 1983 and has an area of approximately 187,400 ha and a perimeter of approximately 239 km. According to the 2014 census (Siasi/Sesai), 813 Yawanawá live in the state of Acre (Brazil). Available at: <https://terrasindigenas.org.br/pt-br/terras-indigenas/3846>. Accessed 9 Nove. 2022.

<sup>3</sup> See list of endangered languages in Brazil. Available at: [https://pt.wikipedia.org/wiki/Lista\\_de\\_l%C3%ADnguas\\_amea%C3%A7adas\\_no\\_Brasil](https://pt.wikipedia.org/wiki/Lista_de_l%C3%ADnguas_amea%C3%A7adas_no_Brasil). Accessed 8 Jul. 2022.

<sup>4</sup> The field research was conducted during July and August, 2016. Arrival in Mutum village was on July 29 and departure on August 18.



Fig. 1: Diagram of villages in the Rio Gregorio Indigenous Land (RGIL) registered in 2016. Source: Mendo, 2018.

For several decades, the Yawanawá people have been receiving visitors interested in the medicinal and cultural knowledge in their villages, which has led to a series of spatial and architectural transformations in the GRIL. This group of women — despite living in a region immersed in the process of planetary urbanization<sup>5</sup> (Mendo, 2018)— maintain and defend their traditional ancestral knowledge, among which is the spatial knowledge of designing the landscape that they inhabit. Upon my arrival in Mutum, according to the cartography shown in Figure 2, the village *cacique* (leader) expressed her interest in the planning and execution of several architectural projects and expressed her desire to build spaces that would express the metamorphosis of the indigenous material culture, understanding the importance of consolidating certain native constructive know-how that would allow for the self-construction and self-management of the spaces. In her own words, it was not a question of "building a house in the shape of a hut", but of seeking the place of Yawanawá architecture in the contemporary world.

<sup>5</sup> In the RGIL, a process of planetary urbanization has set in. It is not obvious at first glance and is deeply interrelated to the process of complete urbanization of society (Lefebvre, 1970; Brenner and Schmid, 2012). It is a set of economic, political and social relations established between the Yawanawá group and external urban agents that reposition forms of sociability, alliance, (re)existence and (re)invention in the indigenous territory (Mendo, 2018).



**Fig. 2:** Arrival by boat in Mutum village. Source: Mendo, 2022 [sketches and photographs, 2016].

I shared daily life with residents in Mutum. Communication was mediated by the *cacique* and a group of women who frequented her house on a daily basis: her sister, sister-in-law and the Yawanawá teacher from the children's school. I was close with this small group and some other women close to them, as we carried out the collective activities<sup>6</sup> in an open space built by the *cacique*, which was an extension of her own house. Throughout the day, this space hosted groups of people of all ages, which spontaneously led to the multiplication of meetings, stories and some drawings produced by these exchanges. From this dialogue, the first sketches of the place emerged, made in my field notebook *in situ*, as well as the photographs of the indigenous spaces, which form the basic documents of this essay.

<sup>6</sup> In the field of research into Yawanawá grammar, group activities were carried out during the first two weeks of the stay in Mutum. Subsequently, workshops were developed with children, young people and teachers from the school, aimed at architectural experimentation. The proposal was to elaborate small "architectural models" of future and desirable spaces in their village.

In this communal space I was able to establish a conversation with the elders of Mutum, who have preserved the structure and configuration of their traditional collective architecture, the *shuhu*<sup>7</sup>, in their living memory. With the recovery of various cultural, artistic and ritualistic practices that began in the 1990s, the Yawanawá also subsequently considered the need to reformulate architectural spaces that would reclaim some of the symbols and/or meanings of the *shuhu*. However, there are no graphic records of this native space and the oral transmission from parent to child is the main source of the spatial and epistemological (re)construction of their traditional architecture. Spontaneously, during our meetings, several Yawanawá voices emerged and narrated their experiences and memories of the ancestral space. The sketch of the floor plan of the *shuhu*, in Figure 3, expresses the graphic reconstruction of a spoken story —sketched during the narration and simultaneously visualized by the speaker— thus allowing for the documentation of a printed orality.

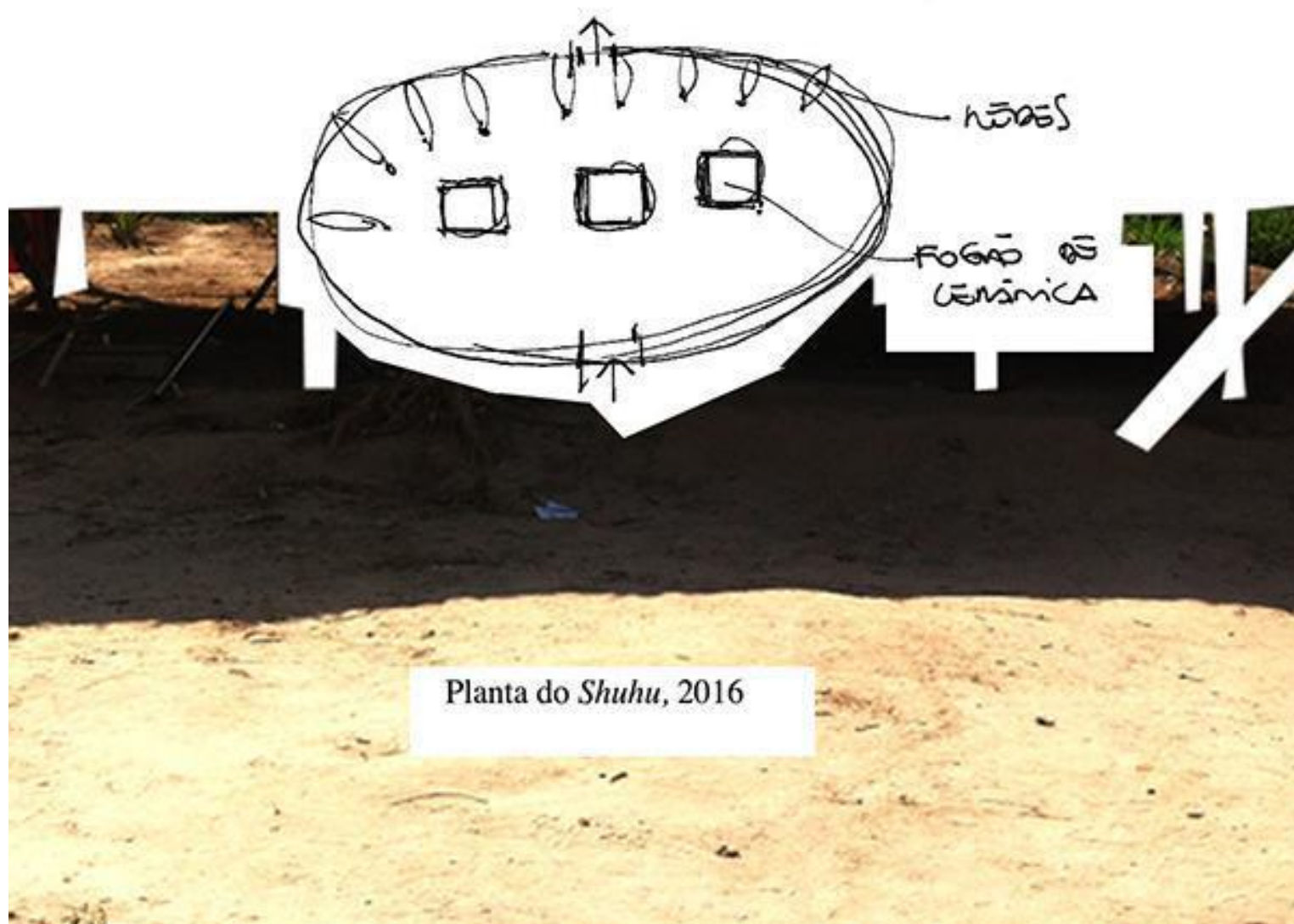


Fig. 3: *Shuhu* floor plan. Source: Mendo, 2022 [sketches and photographs, 2016].

Thus, through the spontaneous exercise of graphic (re)construction of their memories, spatial vestiges of the *shuhu* are articulated to other possible future architectures. In this sense, spatial knowledge survives "in those memories that we

<sup>7</sup> For more information on the traditional architectural object, the *shuhu*, we recommend reading the article "Entre a dança e a arquitetura das mulheres Yawanawá: práticas espaciais indígenas na contemporaneidade" (Mendo, 2022). Available at: <https://www.revistas.usp.br/posfau/article/view/176960>. Accessed 9 August 2022.

reactivate in matrices of the past, but which are present and active, even today, being dynamic and marked by processes of resignification that will define our relationship with the memories of the body-territory in the future of those who are still to come" (Xakriabá, 2020, p. 111, our translation). The encounter with the women and the production of contemporary Yawanawá architecture marked the beginning of a line of research that, from that moment on, is considered of fundamental to establishment in academia: to think and practice methodological exercises of collective construction of knowledge in order to reconstruct a historiography of architecture and the production of Amerindian spaces<sup>8</sup>.

## 2 Learning to Think Together

In order to establish a graphic exchange of knowledge with the Yawanawá women, the first experimental exercise of the architectural research activity was to express myself through a series of sketches and freehand drawings. In 2016, these sketches were not very successful as devices of interlocution and translation of knowledge with the Yawanawá. Therefore, in the second exercise the proposal was to think collectively about other architecture and to construct the imagined spaces through three-dimensional material devices, in the form of architectural models<sup>9</sup>. With this hands-on approach, together we managed to project some of the spaces that were later built by the group —between 2017 and 2019 (Mendo, 2022). Recently, revisiting my field notebooks, I recognised in this graphic documentation and sketches —as in the printed orality of the *shuhu*—, an essential record of the collective creative methodological process and the communicative effort experienced in the RGIL, carried out in 2016.

The montages made and exhibited in this essay in the form of collages excavate and (re)compose, through fragments of sketches and photographic cut-outs, a new account of the everyday experiences, encounters, knowledge, architectures, crossings and bifurcations that dwell in Mutum, as shown in figures 4 and 5. It is important to note that with this sequence of collages and/or impure montages (Jacques, 2021) we intend to progress towards the expansion of a diverse ontological repertoire of non-canonical stories, and this does not mean interpreting and/or describing Yawanawá architectural manifestations, on the contrary, we are affirming that Amerindian ancestral knowledge lives in their bodies and that they are active sources of their own production of knowledge. Thus, as Jacques (2021) suggests, montages can be a form of knowledge, a necessarily impure way of thinking. They are made up of scraps and/or remnants of other materials that, when associated, form other, surprising visions. Through this archaeological exercise, the excavation of memories that inhabit and coexist in different strata of time in the Amazon Forest, we search for vestiges, sediments, silenced voices and reminiscences that allow us to create another past and other possible futures.

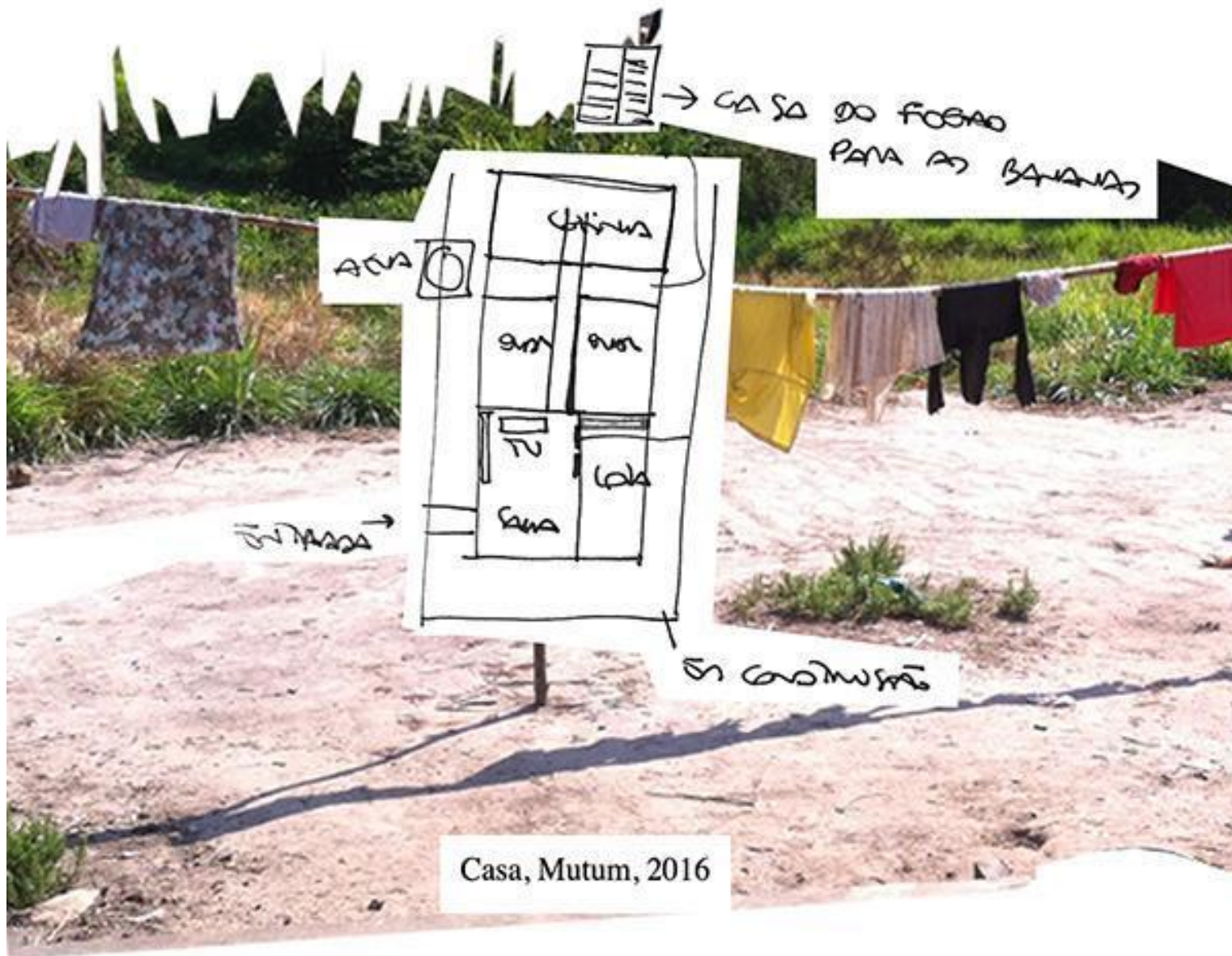
---

<sup>8</sup> The term Amerindian defines the indigenous peoples of the Americas, because of the similarities that unite the indigenous societies of North, Central and South America. Indigenous peoples or communities are also called Indians, but this word is the result of a historical misunderstanding, as the early colonisers thought they had arrived in India, misidentifying the natives as Indians. Available at: [https://pib.socioambiental.org/pt/Quem\\_s%C3%A3o](https://pib.socioambiental.org/pt/Quem_s%C3%A3o). Accessed 22 Nov. 2022.

<sup>9</sup> With this three-dimensional practical exercise, we were able to articulate shared narratives. While making the "inter-models", the intersection of Yawanawá cultural and constructive knowledge took material form, weaving delicate historical and architectural relationships between their ancestral wisdom and contemporary construction techniques (Mendo, 2018)



**Fig. 4:** Graphic record of the Yawanawá Study Centre in Mutum village. Source: Mendo, 2022 [sketches and photographs, 2016].



**Fig. 5:** Graphic records of the floor plan of a contemporary Yawanawá dwelling located in Mutum. Source: Mendo, 2022 [sketches and photographs, 2016].

Therefore, this work is an invitation to construct montages of other possible legacies that must be (re)assembled and (re)mapped together, contributing to the opening up of repertoires and cosmopolitical perspectives of learning which debate and expand what we can understand as the production of Amerindian space, as questioned in figures 6, 7 and 8. It is about claiming that indigenous geographical, spatial, artistic, political, biological and ecological knowledge (Jecupé, 1998; Kopenawa; Albert, 2015; Krenak, 2019; Xakriabá, 2020; Baniwa, 2021) is a powerful tool for the production of ideas and thoughts in the field of counter-hegemonic architectures. This visual research aims to open an academic, investigative and



experimental debate that considers Amerindian knowledge and practices as active and influential in the production of landscape and contemporary architecture.



**Fig. 6:** Photographic record of a house under construction in Mutum village. Source: Mendo, 2022 [photograph, 2016].



**Fig. 7:** Photographic record of a house under construction in Mutum village. Source: Mendo, 2022 [photograph, 2016].



**Fig. 8:** Photographic record of a house built near the dam in Mutum village. Source: Mendo, 2022 [photograph, 2016].

As architects and urban planners we participate in the collective assembly of counter-narratives that, intertwined, formulate perspectives of reading, understanding and reinterpreting the territory. As we participate in the reconstruction and rearticulation of connections, periods and other possible constellations of suppressed or silenced historical memories, we must remain attentive to the incorporation and consideration of other voices and worldviews, including those that live outside the walls of the academy. And, in this sense, to experiment with methodologies to exercise thinking and practicing together, which implies de-hierarchising the classical relations of scientific knowledge production and broadening the paths that legitimize other kinds of knowledge (Viveiros de Castro, 2018). This implies practicing gestures and moving towards a methodological decolonising approach that (re)positions us horizontally with our interlocutors and their intellects, practicing and experimenting with other languages and means of engagement.

Thus, by proposing graphic and/or visual representations as a possible method of dialogue between different forms of knowledge, the aim is also to question some of the existing modes of academic communication that make dialogue impossible, and to experiment with other forms of language. Testing possibilities of redesigning and mapping together implies broadening the spectrum of possible configurations, with the aim of conversing with and being traversed by Amerindian oral knowledge—a knowledge in motion that inhabits the body-territories— which constitute other ways of thinking about and producing architecture. In this reflection, several questions arise *a priori*: Why do native peoples not appear in the historical narratives which shape and found cities in the architectural foundations and of Brazilian urbanism; who cuts, juxtaposes, constellates and produces these hegemonic narratives; and finally, could other impure montages of urban-territorial and architectural historiography be formulated on the basis of Amerindian fragments archaeological and counter-narrative?

### 3 What is Updated as a Heritage

"It is necessary to recognise that pre-colonial human occupation, in a certain way, guides some of the processes of occupation in the present", states Brazilian archaeologist Eduardo Góes Neves (2006, p. 10, our translation), pointing out that Amerindian forms of territorialization are the foundations of present-day urban and territorial occupation—although they are often not recorded in academic historiographies. There is a significant epistemic vacuum resulting from the silencing of Amerindian narratives that has hindered the production of knowledge in the field of urbanism, especially in studies that address the formation and founding of cities and urban centers. In the case of silenced Amerindian narratives, it would not be enough to promote the expansion of plural historiographies, "since it is not a question of different perspectives on history, but of historical reparation", as the architect Paulo Tavares (2020, our translation) observes.

In this discussion, it is paramount, initially, to deconstruct the recurrent narrative that pre-colonial native ways of life left no material marks on the territory, due to their constant nomadism. "It is likely that pre-colonial systems were less mobile than today's [indigenous groups]", reveals Neves (2006, p. 37, our translation). His recent research shows that there was no metal utensil manufacture in the past and, therefore, it is unlikely that the manual process of clearing the Amazonian bush was a consistent practice. Thus, Neves proposes this new hypothesis: Amerindian groups in the Amazon would not have had the degree of nomadism previously concluded by other archaeologists (Neves, 2006).

Following this line of research, one of the contemporary material marks of Amerindian production of the Amazonian landscape is the existence of *terras pretas*— brown soils located near archaeological sites. These lands were produced by indigenous peoples who inhabited these regions for long periods of time and who modified the structure and formation of the soil, creating biodiverse and nutrient-rich soils (Neves, 2006). As a consequence of less agile and mobile agricultural systems, one can also speculate the presence of pre-colonial villages and/or even cities (Heckenberger; Petersen; Neves, 1999), leaving clearly visible marks and foundations in the landscape due to the long-lasting duration of their existence.

Therefore, the *terras pretas* show us how the production of space and environment by Amerindian peoples is the result of prolonged and cumulative periods of occupation and metamorphosis of the territory, which implies a conscious and collective process of *building Forest*. Moreover, during these processes of occupation, numerous and sophisticated methods of morphological selection of certain species<sup>10</sup> were carried out. As such, creating biological relationships and environmental spaces also involved domesticating wild varieties that evolved over a long period of time, that is to say, there is a project of intergenerational landscape making. Recognising that there is an architectural project to build forest—which encourages the production of other soils and the generation of abundant multi-species relations (Tsing, 2012), as shown in the Yawanawá architecture in Figure 9— may be the beginning of an urgently needed epistemic shift in our field of knowledge.

---

<sup>10</sup> These processes are nowadays identified through palaeobotanical remains found in archaeological sites.



**Fig. 9:** Photographic record of a dwelling among the trees in Mutum village. Source: Mendo, 2022 [photograph, 2016].

#### 4 Final Considerations

The dialogue with archaeological lines of research opens up other possibilities for understanding and explaining the production of space and the Amazonian landscape in the past, present and future. And, above all, it is proving necessary to recompose geological narratives and excavate territorial memories buried and rooted in the forest that tap into the ancestral knowledge that inhabits the Amerindian body-territories. This historical reparation must be undertaken, anchored firmly in the active oral history of indigenous peoples. In the case of the Yawanawá, they also demand protagonism in the spatial production of the area of the recent Acrean Forest. From the first years of contact with non-indigenous people in the 1920s-1930s, the Yawanawá were mobilized as a labor force in the *seringais*<sup>11</sup>. Due to their geographical knowledge of the territory, they opened up the rubber roads, communications and the circulation of raw materials by river transport, because "only the

<sup>11</sup> Rubber plantations exploited by non-indigenous groups in the Amazon region.

Indians knew how to explore the raw bush, to explore from one river to the other", according to living Yawanawá oral sources (Vinnya; Pinedo; Teixeira, 2007, p. 27, our translation).

Connected to the historical narratives of the Yawanawá, recent archaeological research confirms the existence of a materially built infrastructure in the Amazon landscape, such as the innumerable embankments, canals, roads, paths, etc., which were laid out by the Amerindian peoples, with their ancestral techniques and knowledge. In this Forest Architecture, the earth is the raw material and, recently, due to the advance of sophisticated satellite mapping techniques, it has been possible to reveal the remains and observe the ruins hidden under the Amazon Rainforest. These architectural and infrastructural formations, which for decades were considered naturally formed spaces, are the result of Amerindian construction processes and, therefore, it is necessary to claim them here as counter-hegemonic forms of architecture aimed at building the forest. These material formations also express the indigenous peoples' resistance in modern times, preserving and reinventing their environmental, ecological, energetic, social, political, etc. practices.



**Fig. 10:** Photographic record of a circular house in Mutum. Source: Mendo, 2022 [photograph, 2016].



**Fig. 11:** Photographic record of the entrance to a house in Mutum village. Source: Mendo, 2022 [photograph, 2016].

With this series of visual documents and/or impure montages, the aim is to show and defend that the construction of this Forest-Architecture is the product of an Amerindian agenda of coexistence with the landscape designed collectively and intergenerationally. Thus, it is visually affirmed, through the sequence of cut-out fragments, that Amerindian Amazonian architecture reveals, as a heritage, a wide range of techniques and knowledge of building land, nourishing soils, generating species, producing botanical abundance as well as their own meanings through their practices of action-production of spaces. The landscape built by the Amerindian peoples, as presented in figures 12 and 13, is being reclaimed here as a spatial projectual practice, since their constructive, technical and material knowledge was and is activated and transmitted, formulating the project conditions for a counter-hegemonic Architecture called Forest.



**Fig. 12:** Photographic record of the bridge built by the Yawanawá in Mutum village. Source: Mendo, 2022 [photo, 2016].





**Fig. 13:** Photographic record of the igarapé Mutum support structure. Source: Mendo, 2022 [photo, 2016].

### Acknowledgment

We are grateful to the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the financial support to our Ph.D. research.

### References

Baniwa, D., 2021. Ficções coloniais. *Revista Zum*. Instituto Moreira Salles. 20.

- Brenner, N., Schmid, C., 2012. Planetary Urbanization. In: Gandy, M. ed. *Urban Constellations*. Berlin: Jovis.
- Heckenberger, M., Petersen, J., Neves, E., 1999. Village Size and Permanence in Amazonia: Two Archaeological Examples from Brazil. *Latin American Antiquity*, 10 Vol. 4, pp. 353-376. Available at: <[https://www.researchgate.net/publication/248329217\\_Village\\_Size\\_and\\_Permanence\\_in\\_Amazonia\\_Two\\_Archaeological\\_Examples\\_from\\_Brazil](https://www.researchgate.net/publication/248329217_Village_Size_and_Permanence_in_Amazonia_Two_Archaeological_Examples_from_Brazil)>. Accessed 10 June 2022
- Jacques, P. B., 2021. *Pensamentos selvagens: montagem de uma outra herança*. Vol. 2. Salvador: EDUFBA.
- Jecupé, K. W., 1998. *A Terra dos mil povos: história indígena do Brasil contada por um índio*. 2ª ed. São Paulo: Peirópolis.
- Kopenawa, D., Albert, B., 2015. *A queda do céu: Palavras de um xamã yanomami*. São Paulo: Companhia das Letras.
- Krenak, A., 2019. *Ideias para adiar o fim do mundo*. São Paulo: Companhia das Letras.
- Lefebvre, H., 1970. *La révolution urbaine*. Paris: Gallimard.
- Mendo, A., 2018. *Tudo o que era ar se desmancha no capital: formas de urbanização extensiva na Terra Indígena Rio Gregório do estado do Acre*. Ph. D. Universidade Federal do Rio de Janeiro. Available at: <<http://objdig.ufrj.br/42/teses/869355.pdf>>. Accessed 9 July 2022
- Mendo, A., 2022. Entre a dança e a arquitetura das mulheres Yawanawá: práticas espaciais indígenas na contemporaneidade. *Pós FAUUSP*, 29(54), pp. 1-13. Available at: <<https://www.revistas.usp.br/posfau/article/view/176960>>. Accessed 9 August 2022
- Monte-Mór, R., 1989. Extended Urbanization in the industrializing periphery: notes on Brazil. *Association Of American Geographers annual meeting*. Baltimore, 1989. Anais AAG.
- Neves, E. G., 2006. *Arqueologia da Amazônia*. Rio de Janeiro: Jorge Zahar Ed.
- Povos Indígenas no Brasil, 1997. *Quem são?* [online] Available at: <[https://pib.socioambiental.org/pt/Quem\\_s%C3%A3o](https://pib.socioambiental.org/pt/Quem_s%C3%A3o)>. Accessed 22 November 2022.
- Tavares, P., 2020. A capital colonial. *Revista Zum*, [online] Available at: <<https://revistazum.com.br/ensaios/a-capital-colonial/>>. Accessed 1 July 2021.
- Tsing, A., 2012. Unruly Edges: Mushrooms as Companion Species. *Environmental Humanities*, 1, pp. 141-154. Available at: <https://doi.org/10.1215/22011919-3610012>. Accessed 8 August 2022.
- Vinnya, A., Pinedo, M. L. and Teixeira, G. A., 2007. *Costumes e Tradições do Povo Yawanawá*. Belo Horizonte: FALE/UFMG.
- Viveiros de Castro, E., 2018. *Metafísicas canibais: Elementos para uma antropologia pós-estrutural*. São Paulo: Ubu Editora, n-1 edições.
- Xakriabá, C., 2020. Amansar o giz. *Revista Piseagrama*, 14, pp.110-117. Available at: <<https://piseagrama.org/amansar-o-giz/>>. Accessed 3 June 2022.