## Territorial In-Betweens

Leveraging agency to mediate the paradox of tourism's growth and decay



JULIA DAHER | TRANSITIONAL TERRITORIES | URBANISM | TU DELFT

## Colophon

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## **ABSTRACT**

Tourism has been more than ever integrated into a global chain and accessible worldwide. This planetary reach allowed small villages in pristine territories to be independent from the eyes of the extractivist industries and included in the economic development plans for the first time. However, this economic opportunity served as an instrumentalised discourse and exposed these areas to extended urbanisation, unsolicited industries and new forms of exploitation. This research delves into the multifaceted aspects of the tourism paradox: exploring the inherent link between tourism and infrastructure, including its impact on extended urbanisation, cultural-environmental exploitation, degradation and preservation opportunities.

With a specific emphasis on the indigenous riverine village of Alter do Chão in the Brazilian Amazon Forest, this research follows two main argumentative frames: It examines (1) the notion of tourism under the lenses of colonisation, to discuss accessibility and present the methods, designs and practicalities in which infrastructural development is implemented. Then, it advocates for (2) viewing the Amazon as an Altered Nature to explore the ongoing agency of local communities in the region. Finally, the project proposes alternative strategies for territorial planning, design and management, aimed at benefiting from the tourism industry to leverage agency and preservation of cultural and traditional practices.

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### INTRODUCTION

This report presents the study developed as part of the Transitional Territories Graduation Studio 2023-2024. The report is one of the products of a Master of Science Thesis in Urbanism at TU Delft which engages in not only research but also proposes design solutions, dialoguing theory and practice and reaffirming the Delft method of research by design.

The research to be presented questions how the industry of tourism — an exponentially growing industry — influences extended urbanisation and territorialisation within pristine territories. It takes the tourism industry as an umbrella to discuss the — still — modern and colonialist approach to pristine destinations.



fig. 01 Advertisement for dive with amazonian dolphins.

In the case of this piece of work, the Amazon Forest is implied as a locational framework. This is an intentional statement as it samples the actions and effects on the most biodiverse biome of Earth. It comes as imperative to question such given preservation and conservation concepts in this case; firstly, facing the climate urgency in which we now live and mostly, facing the demand for new comprehension in order to envision new trajectories and futures.

Under the pretence of colonisation, the project questions the instrumentalisation of Nature and the use of imagetic and discoursive tools, used by tourism, to the implementation of accessibility. It presents how tourism paves the path — quite literally — to unsolicited industries and forms of exploitation. As a supporting narrative, the research aims to uncover the intentional territorial configurations that the industry causes. These are commonly territorial planning that encompasses other extractivism industries and open land to unwished land uses. In that way, the territorial implementation of a touristic destination instead of preserving Nature, threatens it.

More on that, this project departs from the defended theory that the Amazon is an Altered Nature, more created/planted rather than untouched; challenging our preconception of its pristineness. More specifically, it critically assesses the modern understanding of preservation and conservation when it comes to natural and cultural assets. When discussing the notion of human alteration, the project challenges our imaginaries of the Amazonian landscape, bringing forward examples from the past and present that illustrate how original communities conduce practices of care, maintenance and management and how those translate spatially and politically into territorial agencies.

In the following chapters, the report will unfold the multiple and complex aspects with which the touristic sector interacts. It will follow two main argumentative frames: (1) the notion of tourism through the lenses of colonisation. From this angle, the research explores the inherent link between tourism and infrastructure and presents the methods, designs and practicalities that sustain the implementation of tourism and its infrastructural demand. After, (2) it presents the notion of Amazon as an Altered Nature. From this angle, the research aims to discuss the ongoing local agency on the territory. It conduces a series of analyses to unveil - from past to present — which are the tools and methods that have been used to alter this landscape. As a separating line of these two distinct angles, the research positions the concept of Tourism Imaginaries, which fittingly describes how touristic destinations always start with an imaginary of a place and an imaginary of people. (Salazar, 2014) - drawing upon Salazar's work, to describe the colonialist tales that separate the present from the future.

Finally, the report presents chapters on design proposition, in which strategies for territorial planning and design are showcased. Furthermore, an important variant of this work is the proposal of a review on territorial management, which suggests a framework that suggests a more site-sensitive approach in order to align a truly synergetic operation of the tourism industry (foreign practice) with the preservation of the cultural and traditional practices (local communities). When doing so, the project embraces a State-led development while positioning tourism as a viable and best option as an industry. One that holds possibilities for a new logic of preservation and conservation.

### **MOTIVATION**

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The topic of tourism has been a personal fascination, that demonstrates a mix of interest in culture, nature and social behaviour. Personally, the combination of it always bordered a sense of concern. More recently, with my start in the academic world, this concern evolved into an analytical and critical observation of the territorialisation, urbanisation and intense operationalisation of such landscapes.

In my Diploma thesis, 5 years ago in Brazil, I started exploring the topic academically. But apart from theoretical studies, a series of personal experiences during travels around South America reminded me daily of the power of the tourism industry and its potentially deadly effects. This complex and paradoxical state of potential to grow but intensive deterioration of the site, landscape, people and culture lightened in me a sense of outrage. As if anything we - as a society - touch becomes destroyed. Despite the hopelessness, another side of me knew. learned and hoped for another scenario. This powerlessness intrigued and challenged me to try to envision how this could be avoided and what could be more hopeful scenarios.

This project, therefore, came to mind under an intense desire to understand and question the current touristic inclination and to put to test the skills I have gathered in the last 10 years of study and practice into something I believe and hope.



fig. 02

Image from a toilet at Salar do Uyuni. Author, 2018.

## RESEARCH HYPOTHESIS

The main argumentative body of this research departs from the assumption that there are complex interactions and specific dynamics between the tourism industry and the unfolding effects that lead to natural and cultural depletion. Williams and Ponsford (2009) describe this as an environmental paradox.

"As a place-based activity, the consumption of tourism services implies the physical presence of the consumers in the place where products and services are provided. Thus, this production relies on the utilization of territorial resources, which, at the same time. must be preserved for the future. This environmental paradox, as defined by Williams and Ponsford (2009), emphasizes the importance of the sustainable use of resources, which are essential for the supply of a broad set of tourism services."

(Romão, 2018)

This thesis addresses this topic cross relating it to Butler's (1980) Tourism Area Life Cycle (the TALC model) and will in the following chapters namely address it as a *tourism paradox*. According to Butler, tourism areas follow an evolutionary path from growth to decay, inherently linked. Drawing upon these concepts to apply them to an urbanism perspective, one could relate the indispensable need for infrastructural implementation in order to kick-start the tourism sector in a new destination. Evidently linked to this, main regional plans for tourism development address and invest their efforts in mapping large-scale infrastructural pieces.

On that, this thesis will explore the drivers of such implementation and will explain its systemic and strategic allocation of the territory, the construction of infrastructural accessibility and modes of inhabitation of the land.

When applying this hypothesis to the site of the case study, Alter do Chão - in the middle of the Amazon Forest - the construction of accessibility and sprawl urbanisation enlighten the discussion of deforestation, Nature instrumentalisation and exploitation of local communities in the name of tourism. Other scholars have already developed the topic of tourism and its problematic use of infrastructural subsidies. Luchiari & Serrano (2015) have shared in detail that tourism development projects are "[...] aimed at establishing urban infrastructure in regions which are still poor though having a high potential in natural attractions for the organization of tourism activity.". This statement and perspective introduce a lateral assumption that touristic destinations are, firstly, a product of a created imaginary of the place – staged, selected and manipulated. And that the availability of scenic landscapes is enough to be commercialized by the industry. Secondly, it will highlight the hidden intentions behind tourism discourse, which aims at economic development as the foremost justification for infrastructural implementation.

In the following pages, the two main argumentative axes will be explored, dividing this report in Chapter 4 *Tourism through the lenses of colonialism: discussing accessibility* and Chapter 5 *Tourism through the lenses of an altered nature: discussing local empowerment.* 

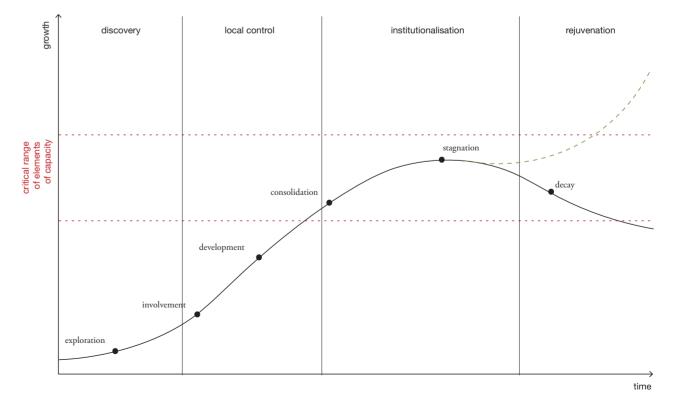
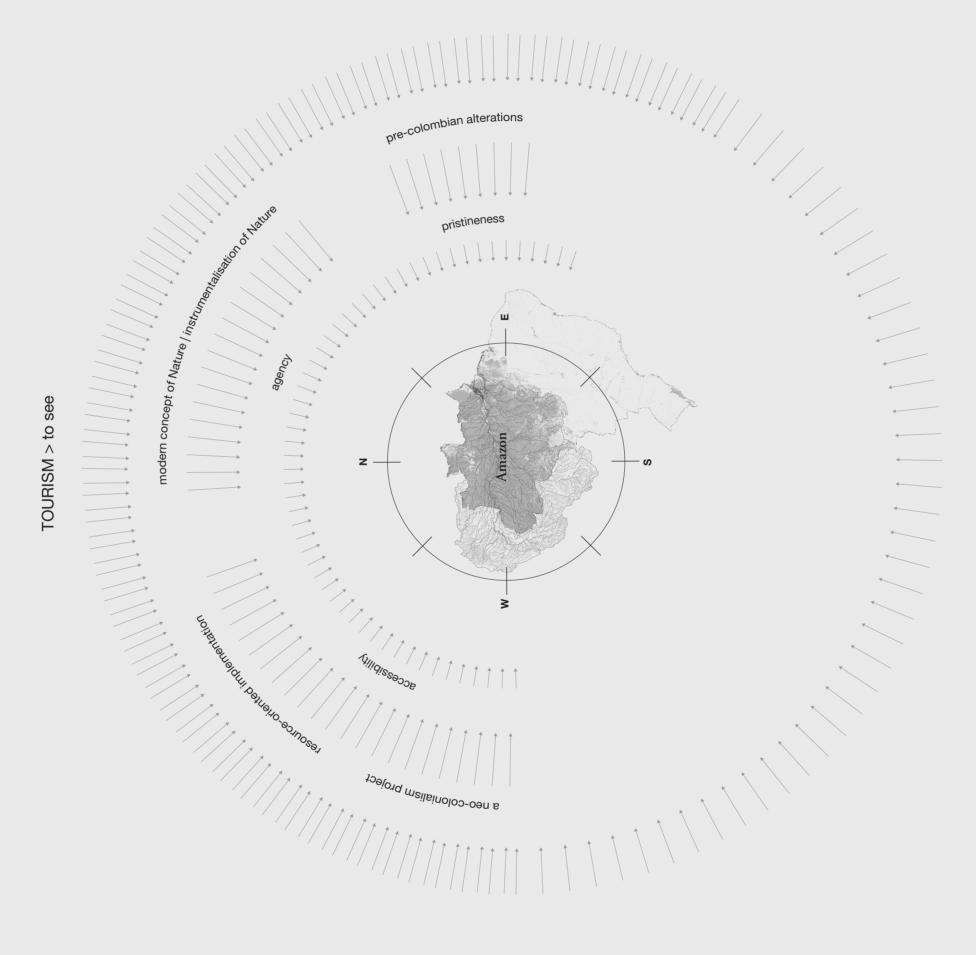


fig. 03 Tourism Area Life Cycle Model. Source: Butler, 1980.

PROBLEM FIELD 21



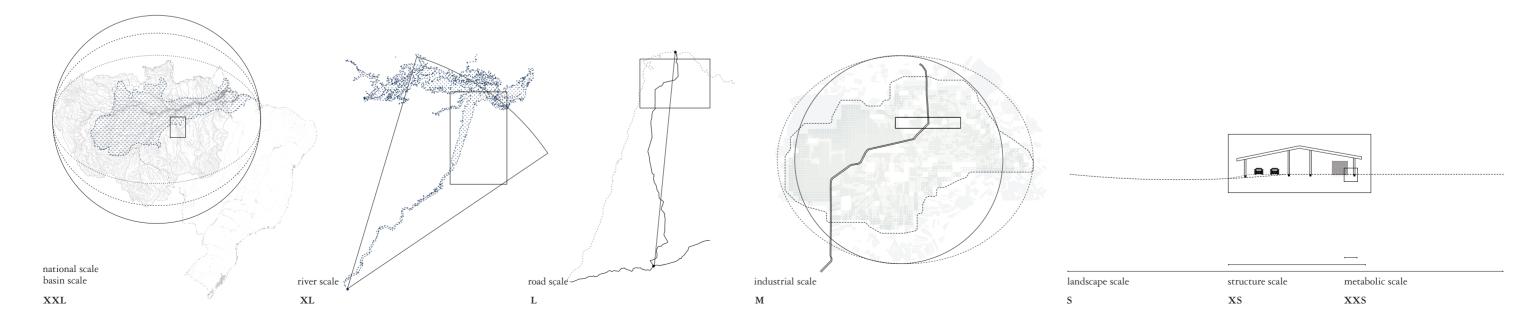
## SITE KNOWLEDGE

#### LOCATING ALTER DO CHÃO

The site of Alter do Chão is located in the state of Pará, which is the last state at the border of the Amazon biome. It is a riverine village that is watered by both Tapajós and Amazonas Rivers and relates to the ancient locations of indigenous populations, that used the river as the main structural and affording body of the forest. The river not only allowed navigation and circulation but also was an important propeller to fertile soils. Multiple indigenous communities were settled along the rivers and the Borari community is the one which to this day resides in Alter do Chão.

Apart from the colonial invasion, Alter do Chão was not intensively altered by other economic activities targeting the state of Pará. Belém, the capital of the state, was an important port during colonial times and throughout this period grew influence over other smaller villages. Santarém, the neighbouring city of Alter do Chão, became the second biggest port of the state, and currently is one of the most relevant ports to export agricultural products nationwide.

Despite the growth and development of the State, Alter do Chão kept its essential characteristics for the last decades, or even centuries. The village – before the tourism sector growth in the area – had less than 1.000 inhabitants in the village. The extended territory of Alter do Chão – in this report addressed as the Low Tapajós region – was house to 13 indigenous ethnicities which maintained cultural and ecological traditional practices over more than 200 communities.



During the '90s, a tourism development plan was funded by the World Bank and created the "Amazonia Legal". The Legal Amazon spatially encompasses 9 different states and sets a framework of specific laws and regulations aimed at the biome scale to balance economic growth with environmental conservation thoroughly. It seeks to control deforestation, protect indigenous lands, and support sustainable agricultural practices. At the time, a pilot plan framed tourism as an economical and regional plan for the Amazon.

Meanwhile, during the '90s and 2000s, tourism destinations were targeting the Northeast coast of Brazil. At that time, resort chains were intensively investing in implementing franchises in the untouched areas of the cost. This movement was notoriously but slowly moving towards the north.

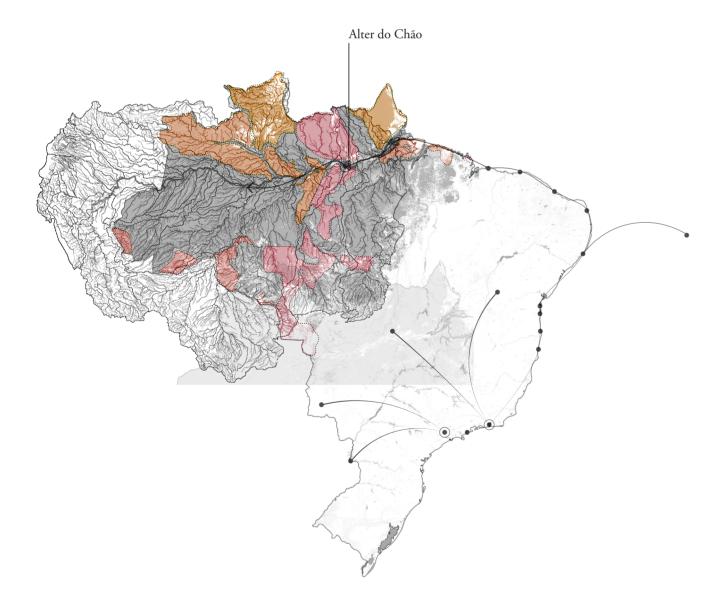


fig. 05

Poles of tourism in the Legal Amazon. Source: MMA and PROECOTUR, 2018

Touristic destinations move from Southeast Region towards North

## Top 10 beaches in Brazil

From the iconic Ipanema to an idyllic river island in the heart of the Amazon, nowhere does beaches better than Brazil

Gavin McOwan



ig. 04 Publication at The Guardian, naming Alter do Chão the #01 beach of Brazil. This was the first introduction of the village to the international press.

In 2009, the British newspaper Le Guardian introduced Alter do Chão to the international media as the Brazilian Caribbean. This piece kickstarted the economy on-site and used the image of this place as one untouched. This means of framing and advertising the village not only ignored its past, full of invasions - but also ignored its present with the thriving communities that here reside in order to sell an image of Alter do Chão as a pristine territory.

Much of this progression of tourism destinations alerts us to question the dynamics of the industry concerning the extended urbanisation process that it generates. The constant wish and seek for *wild* and mythologised landscapes leads it inevitably to *decay*. This was not different in the case of Alter do Chão. Today, the village broke the record of population growth, more than doubling its population in the last 10 years from 6.000 to 11.000 inhabitants, during high tourist seasons and weekends, this number can reach the figures of 20.000.

In the following pages, the concept of No Longer [wild] will be explained, which introduces the trends of the industry of constantly seeking new locations which are more pristine, and supports the theory that the Amazon has been under alteration for longer times

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#### NO LONGER [WILD]

As already introduced in the previous pages, Alter do Chão recently became a target of ecological and natural tourism. It is promoted to be a riverine village that borders the rivers Tapajós and Amazonas and holds multiple scenic landscapes and features that are advertised worldwide. Most of its fame comes from the discourse that the Nature of the village is untouched by modern human intervention.

However, the conception of purity and isolation are questioned once the history of Amazon is unfolded. The Amazon has been under assault over the last 1500 years. Some of these invasions, recognised and important for the narrative of this thesis are: the Portuguese colonisation with the Catholic Church as the main actor; the dictatorship modernisation projects of industrialising the Amazon; and finally the colonisation and settlements projects of Amazonia Legal.

#### COLONISATION

There is an interesting notion that the Amazon has not been untouched even before pre-Colombian times. Although this has been proven wrong and extensively studied by scholars – also addressed in this report on Chapter 2.3 *Notions on Nature: The Amazon as an Altered Nature* with the work of Carolina Levis (2017) –, there is a strong collective stereotypical image that sustains the Amazon as an isolated location. Much of this happens due to a first Western perspective of the Amazon biome and its communities. We can interpret the Portuguese colonisation as the start of an *imaginary of that place*. The forest was seen and depicted — now inter-continentally — as a place of wildness, savagery and extreme biodiverse richness.

From that, colonial interventions followed a different approach from indigenous occupation and clearly altered the conditions in which the place and its people used to interact harmoniously and benefit from each other. The Portuguese understood the Amazon's biological richness as a resource quality rather than an ecosystem to be preserved. It fulfilled the historical role of travel, which often involved the exploitation of new lands and cultures, whether by territorial expansion or consumption of local goods. The colonial imaginary, which still resonates with the perception of this place, embedded it in the sense of a "state of exception" (Agamben, 2005) or "outlaw territory" (Scott, 2016). Both concepts present an understanding that some places lay outside the legal and ordinary conditions. In the case of Amazon, the Western perspective of indigenous people and practices as outdated and an obstacle to progress. More on this will be disclosed in Chapter 4.2 Tourism imaginaries: the landscape, coming on the following pages.





fig. 06 and 07 Paintings portraying the arrival of the Portuguese court and church, under a process of

It is important to note that the conceptualization of the place left territorial and administrative marks on the country. The system of Capitanias Hereditárias, implemented by the Portuguese Crown shortly after the colonization of Brazil, aimed to view Brazil primarily as a logistical resource for extraction. The land divisions were allocated to families with close ties to the Crown, designed to cut horizontally and parallelly, providing land for exploitation and facilitating means of export from land to sea.

This research critically compares this territorial division and planning — all sustained by a greater imaginary — with the infrastructural plans that are discoursively justified by tourism. In this context, Brazil's territorial planning approaches many national roads as a precisely cut element. The first road analyzed in this research is the historic Transamazônica. Later, this thesis introduces the BR-163 road, which was the main focus of investment for the tourism development plan in the Lower Tapajós region

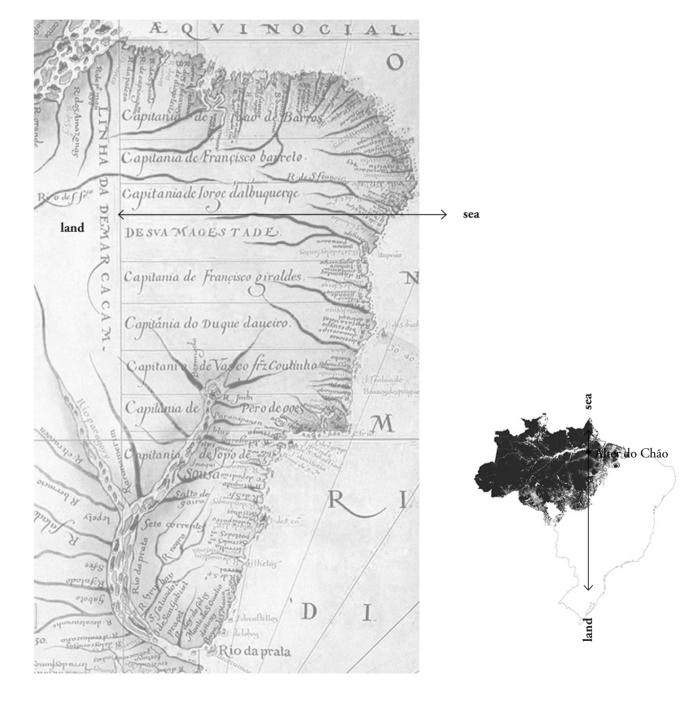


fig. 08 fig. 09

Capitanias Hereditárias, land division system during the Portuguese colonisation its territorial similiarities to road systems of Brazil.

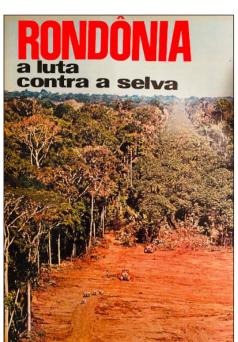






fig. 10, 11 and 12

The dictatorship propaganda: a highway crossing the forest.

Transamazônica

#### TRANSAMAZONICA - THE HIGHWAY

Just as the Catholic church bathed under this discourse in order to impose a new order on the territory socially, productively and spatially, the Brazilian dictatorship did the same. In both cases, the Amazon — seen as an outlaw territory — would be vulnerable to anything that would be necessary to bring progress. The project of a highway crossing the Amazon Forest was strongly advertised in magazines and media. They promoted the motto of "Green Hell" and multiple statements that would go along the lines of "fighting the Forest". Here again, the forest — and everything that lives and inhabits it — was seen as outdated and an obstacle. Fighting the impenetrability of the forest was the first step to implementing a modern occupation and conquering that land.

#### LEGAL AMAZON

Lastly, but not less important, the Amazonia Legal pilot project is filled with ecological-political discourses. The project embodies a series of land use strategies that have been in discussion, such as the Agrarian Reform, a state-induced colonisation, a sustainable land management practice (the agroforestry) and the introduction of the industry of tourism in a territorial and regional plan. The initiative aimed to establish an economic framework and physical infrastructure to enable the access of tourism in the Amazon, not only to the preserved Nature but also to the traditional communities.

Although such plans discuss and advocate for the use of land aligned with the Amazon's cultural and ecological values, it overlook the conflicting effects that extended urbanisation would cause. By justifying the implementation of new infrastructural pieces, the Legal Amazon plans paved the path for industries such as agriculture and mining to superimpose their magnitude and scale over the sensitive territorialisation of indigenous communities and villages. This will be further developed in Chapter 4.1 Tourism Implementation: the infrastructure





fig. 13 and 14

Infrastructural projects that aim on trippling the numbers of tourists

#### NOT YET [IN DECAY]

Despite the increase of numbers in the tourism field in Alter do Chão and its tours through the river Tapajós, the site still holds a character of lack of infrastructure, improvised facilities and overall bad sanitation. These characteristics are common if taken into consideration that the village was not long ago an indigenous community that did not hold an urban structure. The village of Alter do Chão, in the last 10 years almost doubled its population size from 6.000 to 11.000 inhabitants and attracted the eyes of investors. Examples of this are the new projects of the fluvial station and the commission of the airport by the multinational Aena (see fig. 20)

Although the invasion of new inhabitants that come attracted by the new economy of the village, the indigenous population still holds a significant voice. Clearly, this representative is still not enough to ensure a sustainable future, free of unordered growth. However, the population has a relevant consciousness on the political and economic dynamics of the village, as well as, structured itself into hierarchical layers: Deliberative Council (with presidents of each community), Inter-community Council and the Tapajoara (an umbrella concession institution that represents the original people of Tapajós River).

Moreover, the region of Tapajós holds the right to have only indigenous professors in its schools and/or to have a separate school that teaches under indigenous knowledge and perspective of the land. This created big empowerment and advocated for the millennia-long wisdom from the forest. Examples such Escola da Floresta (see fig. 18) that helps to keep these communities aware of the divergent dynamics of other industries that surround them. Much of Amazon's survival stands now on the resistance of such communities.

Collectives are also part of the resistance movement that still fights the pressure of both tourism and other industries on-site. During the site visit, Coletivo Jovem Tapajonicos, Coletivo Vagalume, CITA Conselho Indígena do Tapajós-Arapiuns are just some of the interviewed collectives that helped with this research.

Much of this information was gathered during fieldtrip, which enabled the collection of information that usually lay underneath the radar of digital databases. This is due to the violence rates. Pará, the state in which Alter do Chão is located, is the leader in the rankings of violence for ecological and environmental activism in Brazil, and therefore, being a conscious and active community comes with immense risks. This said, Alter do Chão and its resistance movements still fight back against the tourism trends and are conscious and vigilant in distinguishing short-term profit from long-term decay.





fig. 15 and 16

Population is actively engaged in social and political causes related to indigenous rights.

## NOTIONS ON NATURE: THE AMAZON AS AN ALTERED NATURE

As a case study, the Amazon is a fruitful example for how Nature is instrumentalized. However, part of the process of instrumentalisation happens beforehand, on the imaginary and discursive argumentation, that often portrays a place of purity and untouched state, which does not correspond to reality. Therefore, it is central to locate the Amazon as an Altered Nature - as a place that has been altered and intervened - and to present the concepts in which this thesis finds common ground.

Two main bodies of literature support this perspective: Firstly, Amazon has been seen through the lenses of a wild, untouched, pure and distant from human intervention. This is a crucial topic in this research and its hypothesis because it especially relates to a broader imaginary of the Forest and Jungle as discourses not only mythologised but also strongly tied to its colonial dreams. Noel Salazar, in his book "Tourism Imaginaries - Anthropological Approaches" (2014) explains the imaginary as a concept of presumptions and expectations. Imaginary is a matter of representation of illusions. And tourism is a dispositif which frames and stages these fantasies.

Another perspective of the anthropic Amazon comes from the work of Roberto Luis Monte-Mór, which extensively defends the notion of Amazon as an anthropic and invaded place. In his work "Modernities in the Jungle" (2004), Monte-Mór writes chronologically about the intensive process of occupation of the forest and how modernity has through time spatially altered it. In this perspective, the territorialisation in the Amazon is finally being confronted with pieces of evidence of the Anthropic and questions the notion of a romanticised forest.

Both authors hold essential points of view for this thesis, and in the coming chapters, this work will try to cross-relate how the tourism industry has been using the imaginary of a place (here described by Salazar's work (2014) as a framework for territorialisation (extensive defended by Monte-Mór (2004). In the coming chapters, in which this research will develop this thought, it will stand with specific understandings on the concepts and definitions of "nature", "human agency" and "preservation". Some clarification of the standing points of each of these concepts come below:

#### **NATURE**

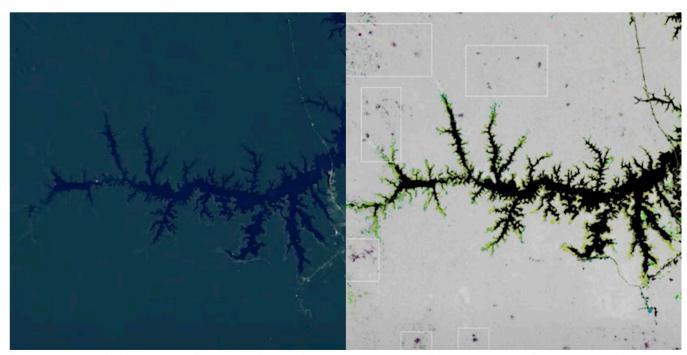
Traditionally, Nature refers to physical events or bodies of ecosystems and geographical features. This, for long, held the idea of Nature as a pristine, untouched and native entity. Therefore, under this traditional Western perspective, Nature was perceived as a separate and distinct entity from human actions.

However, recent work has shown and proved that under the framework of the Amazon Forest, "the most biodiverse territory on Earth[...]" the forest " [...] is to a great extent a spatial heritage of Indigenous landscape designs" (Tavares, 2018). In this context, Nature transcends the conventional dichotomy of pristine wilderness versus human-altered landscapes. It becomes a dynamic interplay between natural processes and intentional human interactions, blurring the lines between the wild and the cultivated.

#### **HUMAN AGENCY**

Bridging these findings with Milton Santos's literature (1996) allows us to emphasize the social construction of landscapes, arguing that they are not merely physical entities but products of human perception, practices, and interactions. Furthermore, Milton Santos argues about the role of power dynamics in the shaping of landscapes: as it suggests that certain groups or societies have the power and knowledge to actively influence and shape territories, adding a dimension of human agency to the discussion.

The latter brings to question how we render power relations. This is because, although both modern occupation and indigenous occupation have agency over the territory, only one is often rendered invisible. In the case of indigenous occupations, their territorialization mostly passes as natural and occasional events, and shadows not only their intentions but also their wisdom. This topic is further developed by Monte-Mór on Modernities of the Jungle: "The low impact of extractive activities of the peoples of the jungle produced, throughout the years, a "natural" space encompassing social practices related to shelter, nutrition, medicine, and leisure, blending into the jungle to the point of becoming "invisible". (Monte-Mor, 2004). This forces us to question, on which side of this angle we stand and which relations are we empowering.



Hidden territories. The terrirtorialisation of indigenous communities. Source: Archeology of violence. Paulo Tavares, 2017.



fig. 18 Ceramic objects from Amazonian soil.

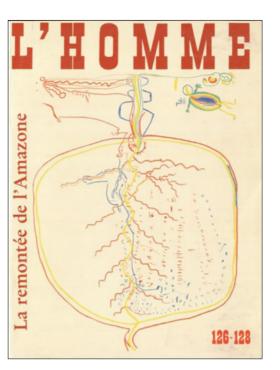


fig. 19 Edition from L'Homme, indigenous carthography of the territory.

More on that, scholars like Carolina Levis researched how the Amazon rainforest is a cultivated landscape, shaped significantly by pre-Columbian indigenous peoples. Her studies (Levis, 2017) published in Science, indicates that indigenous peoples actively managed the forest through practices such as planting, selective weeding, and controlled burning, fostering the growth of useful species and creating "forest gardens." These activities have left a lasting impact on the Amazon's biodiversity, suggesting the forest is a co-created environment resulting from millennia of human-environment interactions.

By putting the indigenous management system at the centre of the ecological solution, Levis's work allows us to question the current conservation efforts, as it highlights the importance of integrating indigenous knowledge and practices into environmental management strategies. In that sense, the idea of presentation surpasses the mere act of keeping the landscape as it is, but rather, actively introducing human influence in conservation efforts.







fig. 20, 21, 22 and 23



Botanical collection from William Baleé and Paulo Tavares. Venice Biennale, 2023.

fig. 24 Aerial image from BR-163 in the division of FLONA Conservation Unit and agricultural land.

#### PRESERVATION

Although the logic of preservation in Brazil aims to balance conservation with sustainable development, recognizing the importance of biodiversity, ecosystems and cultural heritage, much is lost due to its implementation. Conservation Units (CU) are seen as limits (most intangible) that are vulnerable to land pressure and threats.

This happens because the legal process of a CU depends on proof of the existence of biodiversity and the functionality of ecosystems. However, under illegal threats and violations from extractives industries (i.e. using fires, quick deforestation, wood extraction, mining) such parameters could be completely affected and would cause the loss of its conservation rights and, in this case, such areas would fall off of the category of priority areas to be preserved. This process renders the vulnerability of CU, which is always on the target of new frontier expanders, and exposes the weak spot of the logic of preservation in Brazil in the face of growing land pressure and land disputes. Moreover, often CUs are implemented (also by law) on sharp limits, which can pose them neighbouring to depleting activities and higher the likability of such events occurring.



fig. 25 Aerial image facing illegal road.

PROBLEM FIELD

## **TOURISM AS** TERRITORIAL DESIGN

Framing tourism as an industry, similar to other industries in the Amazon, allows for a better understanding of its problematic aspects and potential solutions. In this thread of thought, failing to recognize tourism's economic and industrial capacity leads to an inability to critically examine its roots, systems, and effects, and to see its connections to other harmful industries.

As already contested, the Amazon has been under occupation for at least the last 13.000 years. The colonial project that took place there around 1560, with the arrival of the Portuguese colonizers and church, claimed the ownership of the land from indigenous communities that there reside - and some would say cultivated it. In this topic, arises another concept that plays a relevant role in this thesis: the idea of preservation and conservation. When putting into perspective the destruction and elimination of such cultures in the context of Brazil, promoting a thriving model for preservation becomes the key to forest survival. The idea of a sustainable and resilient preservation model, nevertheless, goes in contrary directions to multiple industries that now exploit the Amazon.

In this chapter, we are not only interested in why is tourism different but also how it possibly interacts - if not, benefits - other extractivism industries. Moreover, it aims to understand if tourism is an extractivism industry on its own. As a study method, a series of Postcards were developed. Called Postcard Series (Appendix I.I), the series conduces a method of image manipulation aimed at extracting the core elements of territorial spatialisation of each industry that at some point contributed to the transformation of the extended Alter do Chão area. From this exercise of image research but also literature research, it was possible to extract which agents, products, and sectors were involved, as well as the consequent spatialization on them and the time-scale in which they function.



fia. 26 Assigned land to communities and ethinicities

PROBLEM FIELD

#### PEOPLE

The land of Amazon is now in occupation and dispute by different agents. Agents of the site are relevant sources of information, as they inform the intentions of that land. In Amazon, a series of occupations throughout the history of Brazil were marked by the colonisation, projects of modernisation and immigration of communities due to climate risks and economic opportunities. However, Amazon is known for being a land assigned to certain communities with the historical occupation of *indigenous and riverine communities* that took place for thousands of years and shaped the territory as it is currently.

The occupation of indigenous people reigned alone until 1600 when the Portuguese colonisation brought the *Catholic church* to control and colonise the tribes in the river areas. The Portuguese Crown around 1750 introduced *African communities* to the land, enslaved as workforce for land exploitation. These dynamics under Portuguese rule lasted until the end of the 18th century with the Brazilian Independence.

After almost a century of no particular umbrella control of the Amazon and stimulated by the big drought in the northeast of Brazil, a new economic cycle started in the Amazon, with special great immigration. The automobilistic industry of Henri Ford, attracted by the abundant production of latex and rubber in the forest, built in 1927 Fordlandia and Belterra (neighbour districts of Alter do Chao). This new industry suddenly attracted northeasterners, southerners and foreigners from Jamaica, Panamá and Barbados, not only to build the infrastructure but also to work as a manual workforce. Americans came to invest, buy plots and govern the land. The sudden decay of the economy left behind devastated forests and empty cities.

This decay lasted until the new economic cycle of Amazon, the gold was first found in Pará and in no time became the biggest mine in the world attracting people from all over Brazil on the promise of sudden fortune.

In 1960 and 1970, with the spread of new roads of accessibility, promoted by the dictatorship projects, an immigration of *farmers* from the centre-south and the southeast of Brazil took place. And in 1990, a boom in the wood extraction occurred, also controlled by high commanders of the centre-south and the southeast industries.

With the introduction of tourism in 1995, the area started to attract people from all over the world, not only visitors but mostly investors who now own land, provide services and conduct hospitality. The neighbouring states benefit from the roads and migrated heavily to small the village of Alter do Chão, starting with entrepreneurship in the field of tourism.

This summary can bring evidence that the Amazon became the land of promised rewards and shoulder to problems all over Brazil, and because of that, accommodated people from all over the country wishing to profit from its richness and productivity.

#### PRODUCTS AND INDUSTRY

The Amazon has shouldered the moving of industries and economic models to its site since its first invasion. Such industries provoked induced immigration, due to the promise of rewards and wealth from the rich and abundant resources of the forest. The presented agents on the previous page, especially the ones which are not local traditional communities of this land, migrated during extractive expansion to the area.

In the case of land surrounding Tapajós River (which bathes not only Alter do Chão but also a total amount of 200 indigenous riverine communities), industries such as agriculture, pasture, cattle breeding, rubber extraction, gold and metal minings are just some of the industries that targeted this land as a resourceful site.

The area altered its production from producing subsistence plantations of manioc, rice, cacao, coffee, sugar, clove, cinnamon, sarsaparilla, ink, fibres, and herbal medicines to more extensive productions of animals, parrots, macaws, turtles, woods and finally into upscaling productions of: gold, rubber, minerals, cotton, tobacco, rice, ink, herbal medicines and juta. Currently, the main productions are related to gold, minerals and wood. Tourism, although not affording the outcome of products, is the main industry that offers job positions and circulates capital into society.

The arrival of new industries of extensive production on the site not only influenced its spatial territory but also, reshaped the time and scale of the land use. While, conscious indigenous land use managed to engage in a cyclical and renovative process, industries such as mining and agriculture exploited land on a shorter time span and larger spatial transformations. It is worth mentioning, that throughout modernisation, such industries introduced non-populated machinery, which reduced the presence of immigrants in the field of extractivist industries and left this social group aside from any economic practice. Tourism can be said to be the industry that still offers the possibility of action in the form of many services that need to be provided.

#### **TERRITORY**

The introduction of extractivist industries started to territorialise the area of the Low Tapajós River. The settlement of specific communities and migration groups to such areas also highlight a pattern of concentration. As industries and interests start to conflict within coincident zones, such groups, populations and values interact.

Going further than the spatial relations, the matter of preservation and conservation units relates to such industrial territories on the accumulation dimension. Mining and gold-digging, for example, located along the river, can contaminate water that flows hundreds of kilometres away. Agricultural production, when upscaled to industrial figures — and especially the ones that make use of fertilizers and GMOs — usually disperses such chemicals through spraying aircraft. Such chemicals, presented in the atmosphere advance to indigenous, organic and touristic areas and harm populations that reside in other areas.

Such fragility and intangibility of the problem, raise the issue of preservation as a whole and as an active effort. The sharp limits of CUs are indifferent to the intangible, metabolic effects of surrounding industries.

#### TIME AND SCALE

As an important factor of the territorialisation of the area, time and scale define the fragility and responsiveness of each industry.

Extractivist industries usually cause deforestation and intense clearance of the area, putting the forest conditions on a stage of no return and irreversibility. The intensity of its activities, such in the case of mining and agriculture and its duration can remove the richness and biodiverse qualities that the Amazon reached after millennia of cultivation and care.

Different practices vary in scale, revealing the underlying power dynamics. Extractive industries rely on large expanses of land and significant capital for acquisition. On the other hand, sectors like tourism, agroforestry, plantations, and fishing typically operate on a smaller scale. This smaller footprint enables local populations to sustain these practices within their accessible territories — and replicate them.

To analyse tourism under the spectrum of territorialisation, it is needed to bring evidence on the matter of how it is implemented. Further discussion in Chapter 4.1 *Tourism implementation: the infrastructure*, will highlight how tourism may seem to have minimal impacts on a destination, but it is intricately linked to a territorial system.

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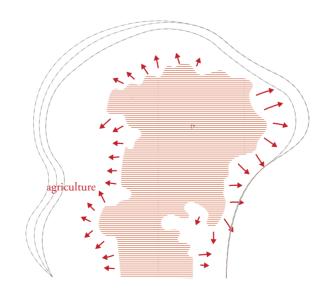
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## **RESEARCH QUESTION**

#### MAIN RESEARCH QUESTION

Beyond the ultimate focus of conservation and restoration per se, how might tourism be reimagined to empower local communities, providing viable alternatives to traditional models of development and exploitation?

#### SUB-QUESTIONS

Tourism through the lenses of colonialism: discussing accessibility

- (1) What are the multiple spheres that influence tourism and how is infrastructure accessibility inherently linked to tourism implementation?
- (2) How has tourism infrastructure implementation impacted local responsiveness?

<u>Tourism through the lenses of an Altered Nature:</u>
<u>discussing local empowerment</u>

(3) What are the tools of agency which allow the local community to reach territorial empowerment, in the context of Alter do Chão?

#### Research to design

- (5) Which design actions could allow a new form of territorialization, led by communities, that act across scale and time dimensions?
- (4) Which structures are needed to establish interfaces that enable the coexistence of locals and foreigners, thus, reinforce culturalecological responsiveness?

## THEORETICAL FRAMEWORK

The main bodies of literature in discussion navigate multiple topics:

#### NEO-COLONISATION AND DISTURBANCES

#### The Legal Amazon and Tourism Development plans

Luchiari & Serrano (2015) in their work describe how tourism development in the Legal Amazon aims to establish urban infrastructure in ecologically rich but economically poor regions. Luchiari & Serrano critique this approach, highlighting how it commodifies natural attractions and manipulates the environment and local communities for commercial gain.

#### Modern Development of Amazon

Paulo Tavares (2018) in his work examines modern development in the Amazon, revealing how infrastructural projects reflect strategies of territorial expansion reminiscent of past authoritarian regimes. These projects often lead to uncontrolled development and disrupt traditional communities and ecosystems.

#### **Environmental Paradox**

Williams and Ponsford (2009) and Romão (2018) discuss The environmental paradox in tourism, as described by Romão and Williams & Ponsford, emphasise the conflict between tourism's reliance on natural resources and the need for their preservation. This highlights the complexity of balancing tourism development with sustainable resource management.

#### Tourism and Territorialisation

Butler's (1980) Tourism Area Life Cycle (TALC) Model describes the evolutionary path of tourism destinations from initial exploration and development to eventual stagnation and decline. Drawing upon this model the thesis relates how infrastructural implementation is crucial for tourism growth but also brings challenges related to resource management and environmental degradation.

Altogether, this set of concepts and literature discusses how tourism and its inherent connection to infrastructural construction contribute to the modern development of the Amazon. It highlights the environmental paradox in which the industry is trapped, being used as a discoursive and imagetic apparatus, that is promoted as a tool for preservation, while often resulting in environmental degradation and short-term decay.

#### AMAZON AS ALTERED NATURE

#### Tourism Imaginaries and Discourse Influence

The thesis critiques the romanticised view of the Amazon, using Salazar's Tourism Imaginaries to highlight how these perceptions are constructed under a colonial imaginary of conquest. Levis and Tavares (quoting Baleé) both draw attention to how indigenous peoples actively managed the forest through practices such as planting, selective weeding, and controlled burning, fostering the growth of useful species and creating "forest gardens." These activities have left a lasting impact on the Amazon's biodiversity, suggesting the forest is a co-created environment resulting from millennia of human-environment interactions.

#### **Cultural Ecology**

James Corner (2014) precisely describes in *Landscape Imagination* the definitions and beliefs of social ecologists. He deepens the description by analysing the two vertents of the discipline: the ones who believe in the need for a cultural reformation and the supporters of redeveloping social structures. The axis of this thesis lies in between both: when both touch upon the scenario of an imaginative force over Nature's comprehension and the urgent need for institutional reform. In fact, I would argue that, in the case of this thesis, one can not be achieved without the other. In other words, the landscape imagination, rooted in culture, is inherently linked to the social structures as they are nowadays. And the need to review institutional structures demands for an intensive imagetic and cultural understanding of Nature and our relation to it.

#### **Extended Urbanisation**

Roberto Luis Monte-Mór (2004) argues that the Amazon is an anthropic landscape significantly altered by human activities. This perspective challenges the romanticised notion of the Amazon as a pristine wilderness, emphasizing the extensive human influence over time.

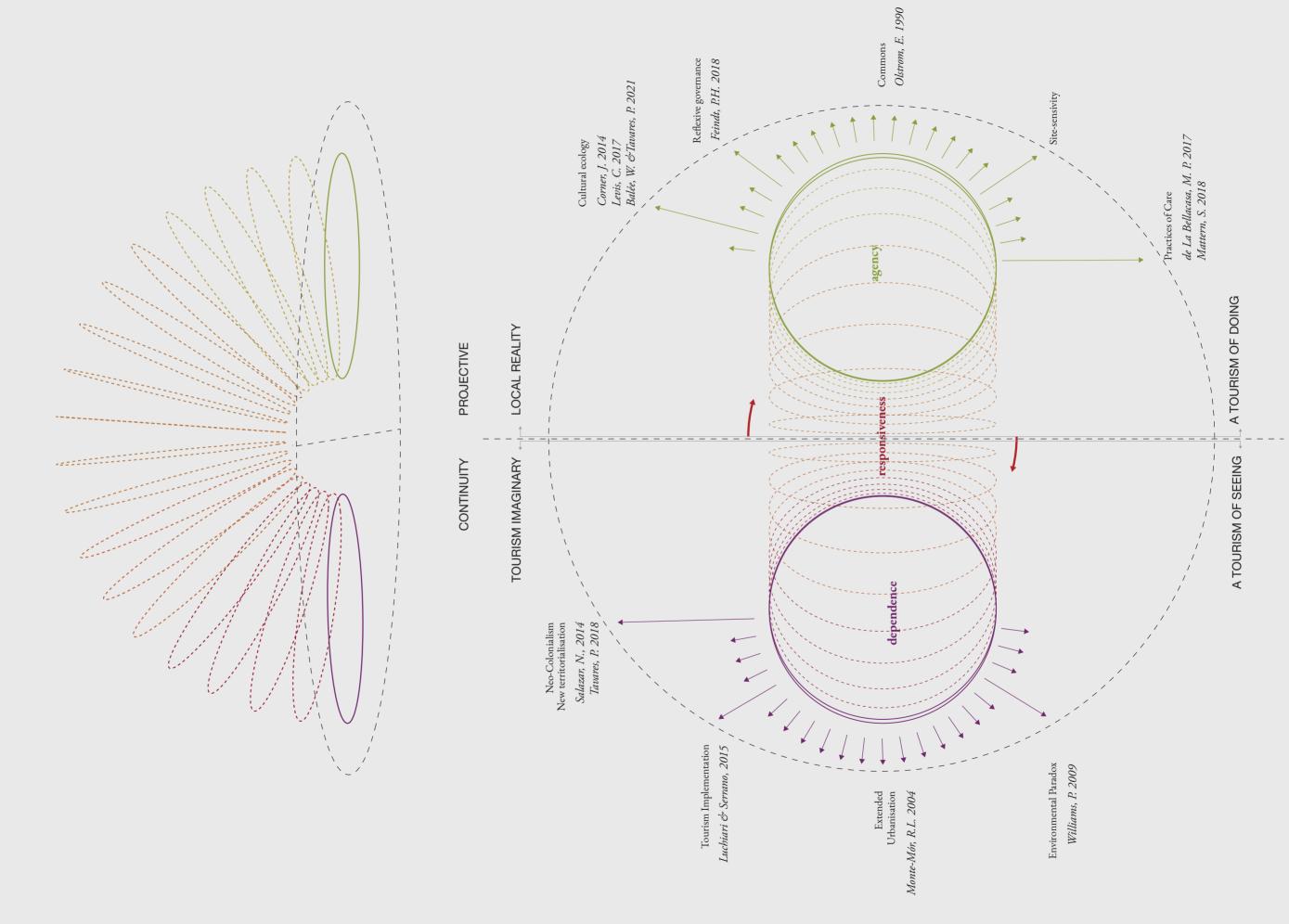
#### Tourism, Development and Territorialisation

Paulo Tavares, Roberto Luis Monte-Mór, Luchiari & Serrano and João Romão all argue on the intentional and unintentional motives behind tourism implementation. As seen in the evidence of Tavares and Luchiari & Serrano, the process of territorialisation of the Amazon is an intended practice of — what Monte-Mór would call — "frontier expansion". The creation of accessibility to the tourism industry arches towards traditional communities and highly valuable ecological areas.

Despite Romão's positive defence of tourism in relation to regional branching, this thesis poses a critique using Paulo Tavares, Roberto Luis Monte-Mór, Luchiari & Serrano's works for it. It aims, however, to get support from Romão's (citing Boschma, 2016) concept to envision ways in which tourism could operate positively.

Altogether, these pieces of literature and concepts discuss the intense process of alteration that took and takes place in the Amazon, favouring the notion that the Amazon is not untouched or pristine, but rather a byproduct of millennia of multiple interventions. It highlights the contrasting ways in which different groups of actors carried it, and the intentional and unintentional reasonings behind it. And the possibilities to operate and to position ourselves in it when it comes to tourism implementation.

AN EVOLVING PROCESS OF SHIFTING TOURISM FROM SEEING TO doing



## METHODOLOGICAL FRAMEWORK

The research presented in this report adopted an exploratory tone and used different media to unveil information and inform the design. Regarding this, the thesis aimed at broadening the methods available and promoting a more nuanced reading of the landscape. It was structured to navigate and research in a situation in which deep data is not available or — I would argue that, in this case —, not needed.

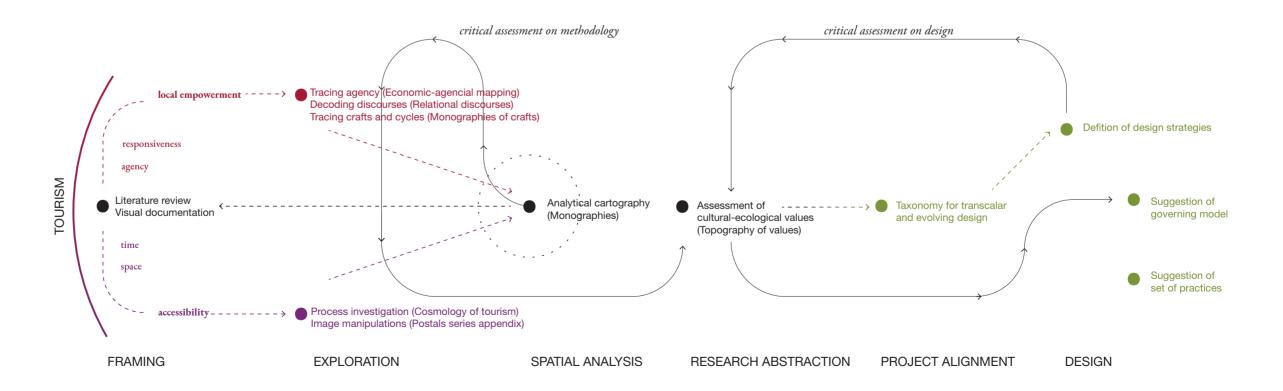
The methodological steps include an extensive compilation of anthropologic and ethnographic research during the exploration phase. The research — which was structured around four primary axes: Time, Space, Agency, and Responsiveness — involved understanding the elements of the tourism sector: including its historical cycles, spatial dynamics, key actors and actions, and material interactions. It was conducted through, literature reviews but mostly an ethnographic study enriched with visual materials, interview analyses, and discourse analyses. This material is presented in Chapters 2.2 Site Knowledge, 2.3 Notions on Nature: The Amazon as an Altered Nature, 2.4 Tourism as Territorial Design, as well as, further developed in Chapter 5 Tourism through the lenses of an Altered Nature: discussing local empowerment.

The material collected during this explorative phase would review on-time the development and methods to be applied in the following phases of the project. It guaranteed a rather dynamic research planning, that adapted to the available information and would find methods to navigate and inform the final product: the design.

That said, the exploration phase — with all its material compilation and empirical information — was followed by a parameter-based method. In this way, information gathered verbally and visually would inform the attributes of the parameters, without the need for spatial precision or locality-based analysis. More of it will be further explained in Chapter 7.2 Topography of Values and 7.3 Parameters. This method sufficiently abstracted information back to an academic and formal structure and allowed the ethnographic and explorative knowledge into systems and scales tangible to the urbanist skill.

Finally, the development of proposals directly responds to research outcomes, using the collected material to critically address the current situation and foresee potential shifts in operations. The project organizes its critiques into three axes of intervention: Strategies, Ethos, and Processes. These interventions aim to mediate larger-scale plans (usually data-based) with on-site sensitive information, (often overlooked by traditional methods). The proposed Strategies involve design interventions targeting existing hard infrastructure. The Ethos emphasizes empowering and strengthening governance systems to stimulate the development of soft infrastructure. Lastly, the Processes focus on creating structures that foster the conditions for various practices, materials, and agencies to emerge and thrive.

Altogether, it can be said the first phase of research and its exploration tone completely conducted the thesis, throughout all time. The presented design and strategies can not be disconnected from the research and exploration material, because they (1) are a product of these findings, (2) respond directly to information that are not data-based. Connecting research to design profoundly.



Tourism through the lenses of colonialism: discussing accessibility

## TOURISM IMPLEMENTATION: THE INFRASTRUCTURE

"[...] the mythification of places for the establishment of internationally attractive touristic enclaves in regions that still maintain their natural ecosystems and their natural populations living at subsistence levels, robs

(Luchiari & Serrano, 2015)

from these people the

last resource left. "

"[...] the concepts of relatedness, variety, and regional branching, also proposed by the EEG framework (Boschma et al. 2016), provide useful tools to explore the potential of tourism activities to engage in systematic processes of interconnection with other (related) sectors, which is only possible if the region disposes a variety of economic activities that can comprise an interrelated innovative network. In that sense. [...]. tourism and its potential broad scope of activities can prompt the development of new regional branches and to contribute for a diversification of the regional economies, [...]"

(Romão, 2018)

The evolution of tourism, particularly in the 20th century, is closely tied to economic growth, urbanisation, improved communication, and especially transportation. This latter is specifically relevant to the framework of tourism in pristine locations. This is due to the notion that such locations are isolated and distant from modern centres. This idea of isolation is closely tied to the accessibility provision. In the matter of tourism, in order to access and grant space for such activity a series of infrastructural implementations have to go in course.

This dynamic put to the table the question if tourism, which in general portrays itself as an industry with few local implementations is actually connected and rooted in a system of large scale. In the case of Alter do Chao, in the Amazon, more relations can be cross-related. Firstly, large-scale projects in the Amazon follow a previous ton – similar to one of the dictatorship governments – and spatialize a new territorial configuration.

Many scholars have developed critical literature about the intended territorialisation that happens in the form of unordered actions throughout the region. As seen in the evidence of Tavares and Luchiari & Serrano, the process of territorialisation of the Amazon is an intended practice of - what Monte-Mór would call - "frontier expansion". The creation of accessibility to the tourism industry arches towards traditional communities and highly valuable ecological areas. Luchiari & Serrano develop this thought in:

"The Action Program for the Development of Integrated Tourism (Programa de Ação para o Desenvolvimento Integrado do Turismo - Prodetur), for instance, with funds from the Inter-American Development Bank funds and counterparts of both federal and state governments conceived and structured in both federal and state spheres, is aimed at establishing urban infrastructure in regions which are still poor though having a high potential in natural attractions for the organization of tourism activity."

(Luchiari & Serrano, 2015)

Here, we highlight the ecological and social palimpsest that happens when such development projects overlap their supremacy and magnitude over areas of sensitivity. More can be added up in this implementation process. As unfolding effects of infrastructure implementation are a key problem of this action. The current context of the Amazon is specially described by the high rates of deforestation, the frontier of the agricultural industry, wildfires and criminal fires, as well as logging and illegal mining. The Amazon, seen as a melting pot of multiple valuable resources, is the target of such industries and granting unordered access to the Forest can

have irreparable consequences.

The cartography presented on the pages 50 and 52 highlights the correlation of tourism routes and accessibility by infrastructure to the areas of deforestation and mining activities. There is a visible spatial relation that interlinks infrastructural mobility with extractive practices. Therefore, it becomes important to question development projects of tourism that focus their implementation on infrastructural construction without the necessary considerations for what that could mean in a future scenario. In this sense, the implementation of tourism - on the methods practised now - bridges highly ecological and cultural areas to the path of decay.

In Romão's literature work (2018), the concept of tourism and regional branching is compared. He disclaims how tourism could branch into the development of other economies, and in a general sense, promote an added value to the region. As the main economy promoted on the Legal Amazon framework, tourism served as discoursive justification for infrastructural implementation.

In this, the thesis challenges this correlation, when applied to the site of Alter do Chão. The introduction of tourism as a leading economy led, in fact, to unfold in an uncontrollable and out-of-order way. Paulo Tavares, in his work Memories of Development (2018), discloses that such intentions lay in an orchestrated strategy of modern development towards North.

#### PARADOX

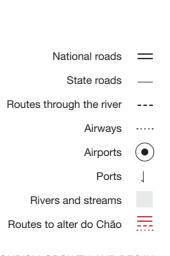
The diagram in the following page conceptualizes the paradoxical relation between infrastructural growth to fulfil tourism industries' number and the expected land use and land preservation intents that come with it. It also introduces, the role of tourism imaginary - which will be explained - in the discourse of tourism implementation.

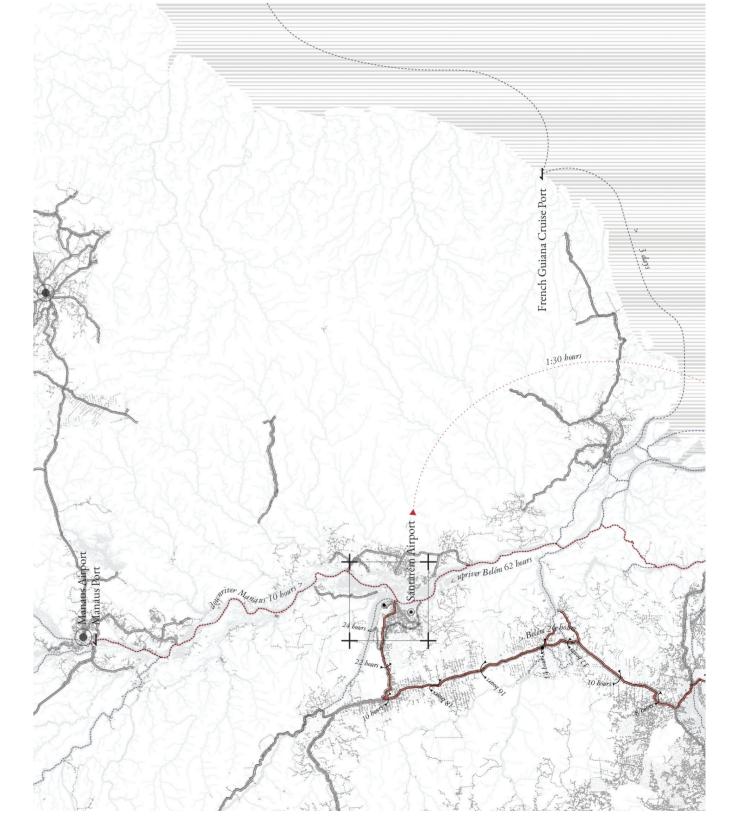


fig. 27 BR-164: export of agricultural production.
Source: MapBiomas, DNIT



Source: Gay, J. & Decroly, J. (2018). Les logiques de la diffusion du tourisme dans le monde: une approche géohistorique

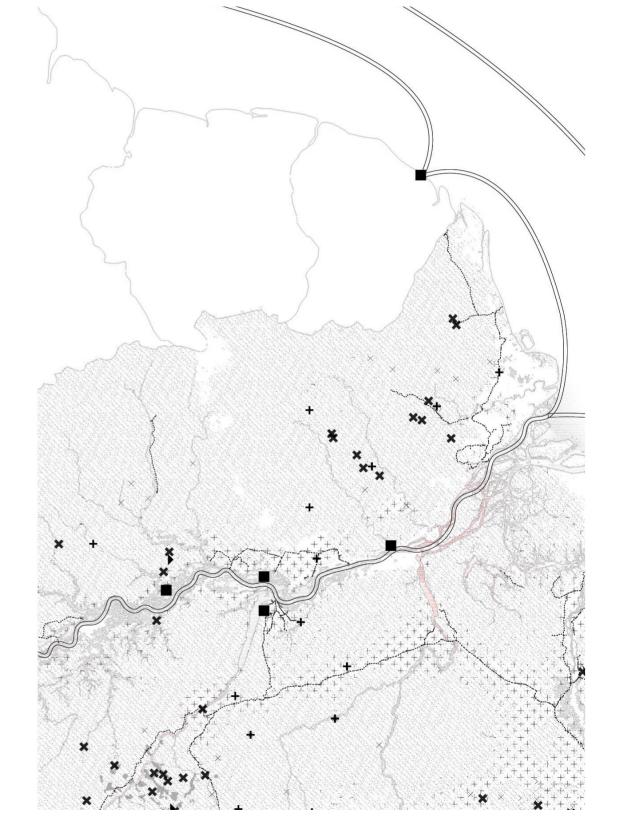




Extractivist Mining
Industries
Agriculture
Wild fires
Touristic routes
Touristic spots
Conservation area limit
Roads
Amazon Forest Biome
Water bodies
Contour lines - 50m

TERRITORIAL IN BETWEENS: LEVERAGING AGENCY TO MEDIATE THE PARADOX OF TOURISM GROWTH AND DECAY

Mining areas x



# TOURISM IMAGINARIES: THE LANDSCAPE

As presented in the previous chapters, the tourism industry recently grew exponentially and became an interesting economic model for smaller municipalities and regions with highly valuable ecological and cultural assets. In this research, with a focus on the tourism movement of Alter do Chão, which promotes itself as a sustainable model, we will question the discourse that helps to push further the growth numbers and masks the background system that takes place to support such industry.

Although the tourism industry indeed engages with the local communities (in the role of provision: such as offering jobs and income through hospitality and guiding positions) and brings to the discussion a more conscious experience on site, this new industry came supported by a partial discourse that unperceived - or not - advertises the industry for its low intervention-high profit rate.

As mentioned before, also by authors such as Noel Salazar (2014), the role of the tourism imaginary grew as media and communication became core agents of the industry. The collective image and discourse, highly influenced by mythology and colonial tales, evoke in visitors a sense of expectation and belief. In the case of Amazon, the illusion of isolation and remoteness bring a sense of time travelling. Moreover, the Western perspective on the Forest and its people resembles an understanding that such communities are obsolete and frozen in time.

TERRITORIAL IN BETWEENS: LEVERAGING AGENCY TO MEDIATE THE PARADOX OF TOURISM GROWTH AND DECAY



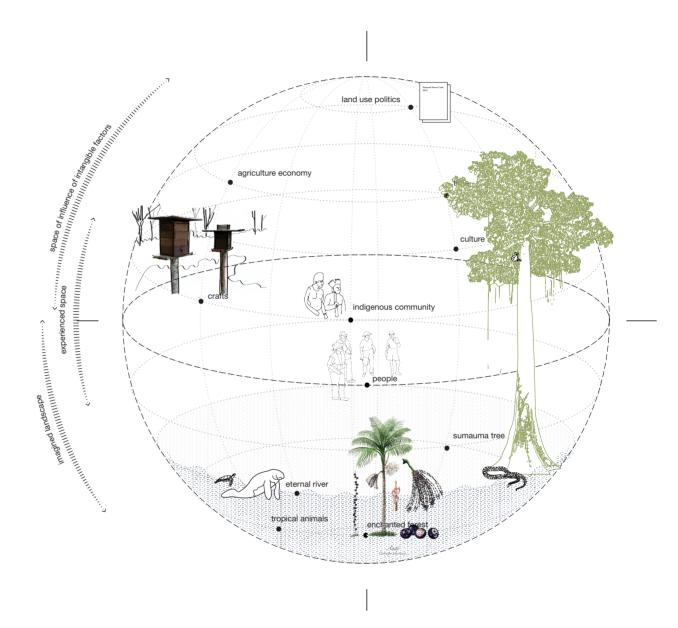
29 Experiencing Otherness. Source: Salazar, N. (2014) Tourism Imaginaries: Anthropological approches

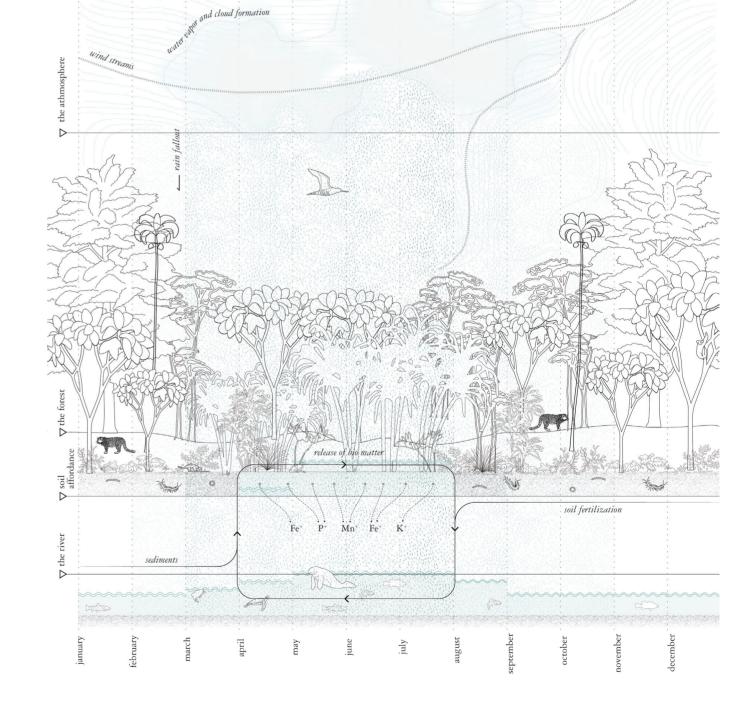
If one pictures the marketing strategies and advertisements used to encourage travellers to Alter do Chão, we could believe that the site is, in a way, staged. It is staged to be perceived by the tourists the way they expect it, but mostly, staged because such communities never actually stopped relating and evolving with time - a concept that goes against the imaginary of indigenous people. One could say, that even the mere Western understanding of the Amazon as an untouched and pure place is an illusion on its own. As already better developed in Chapter 2.3 Notions on Nature: The Amazon as an Altered Nature, the Amazon has held human interventions since 13.000 years ago and, as many defend, is itself a product of human cultivation.

Also, the modern occupation (agricultural monocultures, pastures, gold mining and logging) of Amazon takes place not far from the main tourist attractions that consider themselves conservation units. Logically, a mere neighbouring iteration, shouldn't completely erase the valuable intention of a conservation unit; but it makes one wonder the fragility of it. This is all said, to question the wholeness of an imaginary and the potential to influence a collective mind while maintaining a whole operational system in the background. This doubt and contrast will guide, in this research, the main body of hypothesis: that a tourism image and discourse is used as apparatus to implement a territorial system. The point of territorial design and how it unfolds in this location will be better investigated in Chapter 2.4 *Tourism as territorial design*.

Apart from the discoursive imaginary and the typical landscapes envisioned, the drawing set presented in this chapter intends to illustrate the elements of desire in Alter do Chão: the river and the people. However, the river and the people are represented in a cosmic and indigenous way. It highlights the sense of time and connectivity to land. Meaning that the people can not be represented if not in relation to the occurrences of natural phenomena and seasonal dynamics. In the drawing the river depicts a crucial role in the whole affordability of the land: the floods seasonally allow nutrients to be brought to the surface and fertilize the soil for plantation and sustainable harvest. Following this logic, one can easily notice that the cultural practices of local communities are completely in sync with the occurrences of the river and fluctuate around the harvest calendar and fishing calendar.

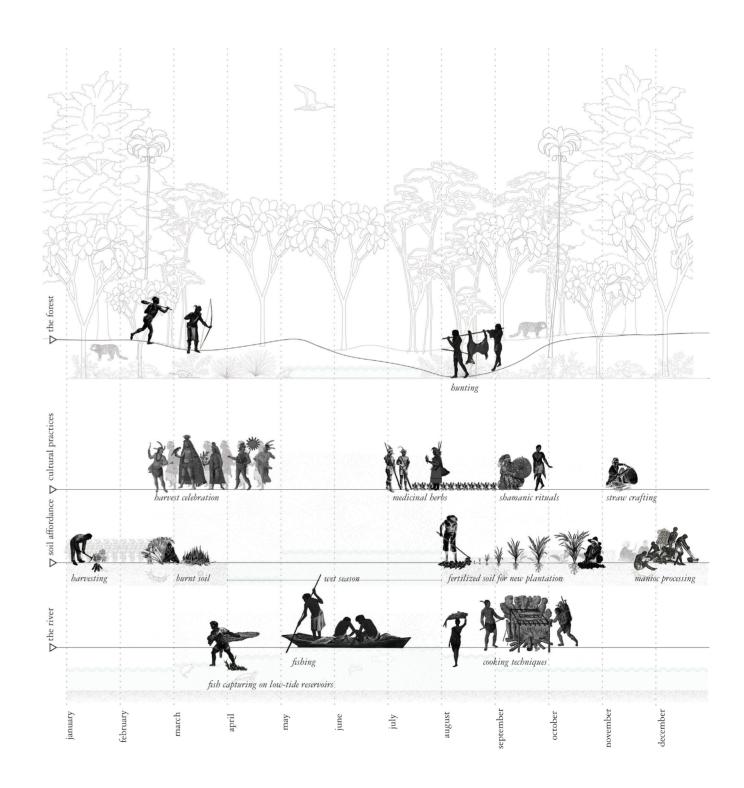
The cultural and natural imaginaries of this place, are, therefore, not valuable if not considered in combination with the preservation of the river and the community. In Chapter 2.4, the topic of territorial design and how other industries and other elements (such as the ones from tourist implementations) interact with this land.

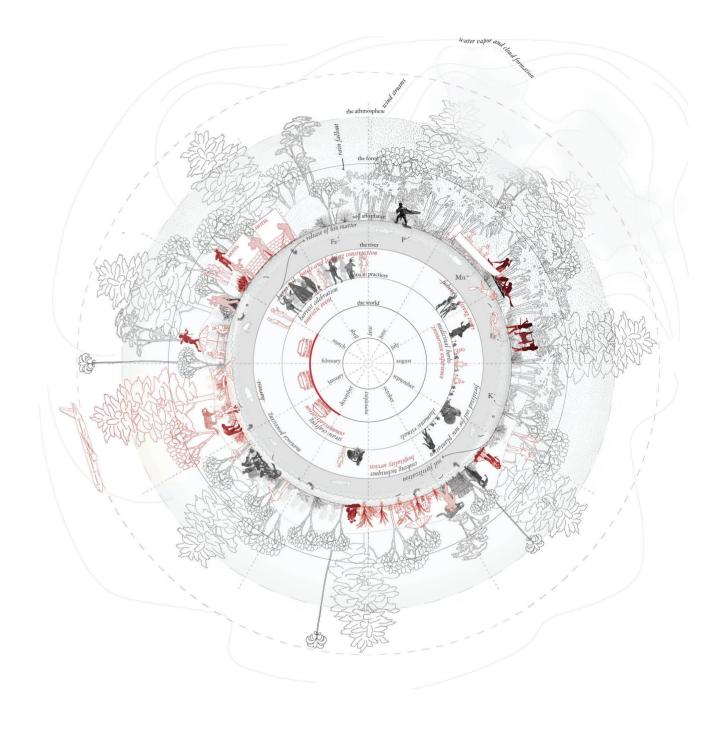






TERRITORIAL IN BETWEENS: LEVERAGING AGENCY TO MEDIATE THE PARADOX OF TOURISM GROWTH AND DECAY







TERRITORIAL IN BETWEENS: LEVERAGING AGENCY TO MEDIATE THE PARADOX OF TOURISM GROWTH AND DECAY

#### CONCLUSION

"Contrary to the general perception, the apparently chaotic patterns of deforestation plotted on contemporary maps of the Amazon are not the collateral product of lack of government intervention and control, but precisely the opposite. These ruined landscapes were designed by an orchestrated strategy whose origins date back to the militarized colonization projects implemented by the dictatorship. [...] their designs were formulated and legitimized by discourses of security and development; and this project was implemented on the ground through the alliance between the power of transnational corporations, international financial institutions such as the IMF and the World Bank. and an authoritarian

Tavares, 2021

planning apparatus."

After considering the analysis presented, one can conclude that the topic of infrastructure is inherently linked to tourism. Tourism, as we know it today, results from the development and evolution of accessibility and means of transportation, which have facilitated global access. When relating that to the pretence of colonialism, the thesis questions how tourism paves the path - quite literally - to unsolicited industries and forms of exploitation. As presented in this chapter, Luchiari and Serrano (2015) drew attention to the essential tone of infrastructure for tourism implementation; which confirms not only the granted access to land but the intentional strategy of doing so.

By analysing tourism through the lenses of colonialism and exploring issues of accessibility, the project gained insight into the territorial impact of tourism initiatives in the Amazon.

The exploration and analysis revealed how a systemic network can be rendered invisibilized while facilitating the entry of unsolicited industries - leading to conflicting interests and land occupations. Particularly concerning is the lack of accountability within the tourism sector for the implementation of its infrastructure, a point that is further addressed in this thesis.

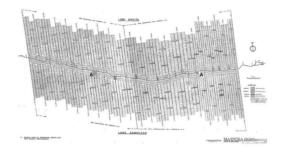
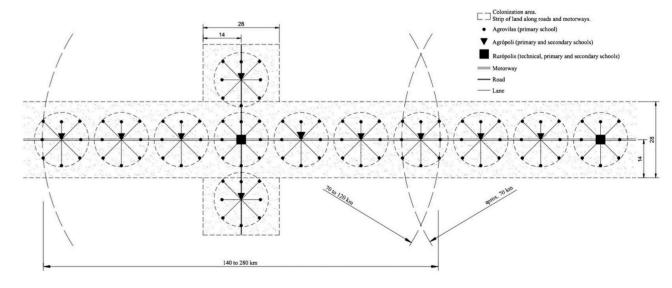




fig. 30 and 31

Linear land subdivision along the Transamazonian highway.

Source: INCRA (1971) and Paulo Tavares (2018)



Rural Urbanism planning scheme for the Transamazonian highway. Source: Calisto Duran (2019) from Rego (2017)

Tourism through the lenses of an altered Nature: discussing local empowerment

## AN ETHNOGRAPHIC BI UFPRINT: TIME

Part of the research, presented at Chapter 2 *Problem Field*, already followed an ethnographic and anthropologic tone. Deep analysing the history of the place and showcasing original communities' historical synergy with Nature, as well as the timeline of interactions with the tourism sector.

In this section, research conducted during fieldwork will deepen the concept presented in Chapter 5 *Tourism through the lenses of an Altered Nature: discussing local empowerment*, and depict the methods and means by which these communities interact with Nature. Specific focus will be given to land practices and traditional activities that such communities perform. These, are practices known for being ways of safeguarding their territory and the standing forest, as well as sustaining the condition of the well-being of the communities and of ecologies that surround it.

The disposed drawings were collected from the Exhibition Walker in the Amazon, from the Peruvian Pavillion at the Venice Architecture Biennale 2023. The drawings are collections of self-made community calendars that intend to express the relation community to the landscape in which they inhabit. The drawings show a clear distinction of landscapes: river, soil, forest and communal areas; while the community stays in the centre, crossing the borders of each landscape for extraction and cultivation practices, religious praisings and leisure activities.

These calendars, help to highlight the affording bodies of Nature in which the community interacts. The River, for food and leisure and spiritual rituals. The Soil for food and management. The Forest for extraction and rituals. The Community for decision-making and leisure.

The analysis of the calendars allows for an understanding that practices are landscape-conditioned. More on that, exploring and reviewing the Community Calendars, allowed the comprehension that communities through time introduced tools, materials, and processes to tweak natural cycles into year-round abundances. And conclude that, the more engaged and innovative they were with traditional practices, the more they managed to bridge the gap of representativity in Political, Policies and Economic Associations, aware and conscious of their agency on the land and territory.

The drawing aside, depicts the crafts performed by communities in Alter do Chão, their connection to Nature's cycles as well as their time x spatial footprint.

# AN ETHNOGRAPHIC BLUEPRINT: AGENCY

As a continuation of the analysis made in the previous section, this section aims on tracing the extent of the agency of the local communities. It does so by schematically drawing the economic and planning system, and representing, in a brainstorm-like structure, how power relations and agency come from different systems scales and time periods.

The diagram disposed on the side, illustrates an overlapping of schemes — from territorial-economic planning, tourism activities, local community production and local community representativity in planning decisions. The scheme illustrates how tourism and development plans are allocated to high-scale (national, basin-wide) institutions and tourism operation and production are exclusively reserved on local scales (territorial and communal scales)

Tourism development plans have set the tone for the touristic development in the area as they have reigned solely, without consultation on original communities or local institutions.

Parallel, communities on the bottom end of the scheme were — always — demanded material and cultural production and affordance to sustain the touristic market. Throughout time, with the engagement of communities in the touristic routes, this demand for material and cultural products increased even more.

After the officialisation of the Conservation Unit (FLONA Tapajós and RESEX Arapiuns-Tapajós) and institutionalisation of Deliberate Councils for the Indigenous communities, the indigenous population started to participate and be represented in planning processes. Leading on this representation, are communities known for being experts in their land practices.

Examples such as Comunidade de Anã, that sells produces of their agroforestry system, created innovative methods of aquaculture and developed sustainable and circular fish food. They are leaders in advocating for Community-Based tourism practices, as well as offer limited availability to tour within their community. This example helps to confirm how communities which are engaged with their land practices manage to successfully expanded their impact from situated outcomes to a broader territorial scale. Moreover, apart from being powerful agents of the territory and stewards of the Forest, they are capable of governing and managing the conditions in which the territory is visited and used.

This network became a detailed board of analysis for tracing the agency of local agents. The continuation of this analysis, community by community, can be seen in Appendix III *Site Visit*. There, the analysis of the agency of each visited community is performed.

## RELATIONAL DISCOURSES

Imagetic material played an important role in this research, adopting a discovery and unveiling character. But ultimately, were interviews and conversations the ones that derailed — quite positively — the path of the design proposal.

These interviews were crucial in confirming that tourism exists in a paradoxical space: of positive-negative, empowering-colonising, leverage-imposition. And an essential step in highlighting that the critical approach should be less polarized and dual, but more gradual. The discourses of the agents interviewed allowed an understanding that communities were not only aware of their position in the current plans of territorialisation but also responsive and resilient. These discussions provided clear insights into their methods of response and their intentions and desires concerning the tourism sector.

This section works with raw interview data (words, sentences, key topics, phrase formulation, and related topics...). In this way, this method allowed to decoded sentences into words and clustered them into categories. This approach enabled the identification of which individuals (and, by extension, which communities) were more or less responsive to engaging with tourism, and what their tradeoffs were.

The drawing aims to illustrate tourism at the centre of the multiple narratives that take place in Alter do Chão. Moreover, it aims to converge possibilities of responsive actions. For now, two sides of the diagram illustrate how, although related, Nature, as seen through the lenses of tourism, and Economy are not connected, and pose as conflicting interests to each other. The following Chapters will try to unpack and address it by proposing a set of strategies and design interventions and robust governance model in order to mediate the paradoxical tone of tourism.

#### CONCLUSION

Analysing tourism through the lenses of an Altered Nature allows the project to acknowledge original communities as stewards of the Forest. Initially, the explorations made during the site visit, highlighted how innovative means of engaging with land practices serve as responsiveness and community empowerment at the territory level.

After that, recognising that certain communities are leading entrepreneurial initiatives in land management, ensured that they successfully expand their impact from situated outcomes to a broader territorial scale.

To confirm this on a broader scale, this thesis analyses the context of Tapajós (basin scale), in which original communities are noted to have resisted within extensive agricultural land, fires and deforestation areas and overall ecological degradation. The presence of these communities and the continuation of the practices on land prove their resilience even when surrounded by enormous external influences. Most of all, it suggests that territories should be approached with less polarisation and duality, but rather with a recognition of gradual shifts. In that sense, what would once be considered a culturally and ecologically degraded land, in fact, presents traces of responsiveness.

From that, I draw attention to the literature of João Romão in Tourism, Territory and Sustainable Development (2018), in which he precisely describes how intermediates and non-fitting contexts are usually considered "market failures", while in fact, holding potential to be a beginning for a set of new categorisation and means of analysis.

In this way, this thesis and the conclusion wish to point back to the wide range of gradients that the territory of Tapajós presents. Reinforcing the thesis's opposition to the current policies of preservation and emphasizing that even in areas initially perceived as fragile, there may lie intriguing opportunities waiting to be discovered and capable of governing and restoring ideal conditions by communities - when perceived as powerful agents of the territory, capable of governing and restoring ideal conditions.

6

#### **INTENTIONS**

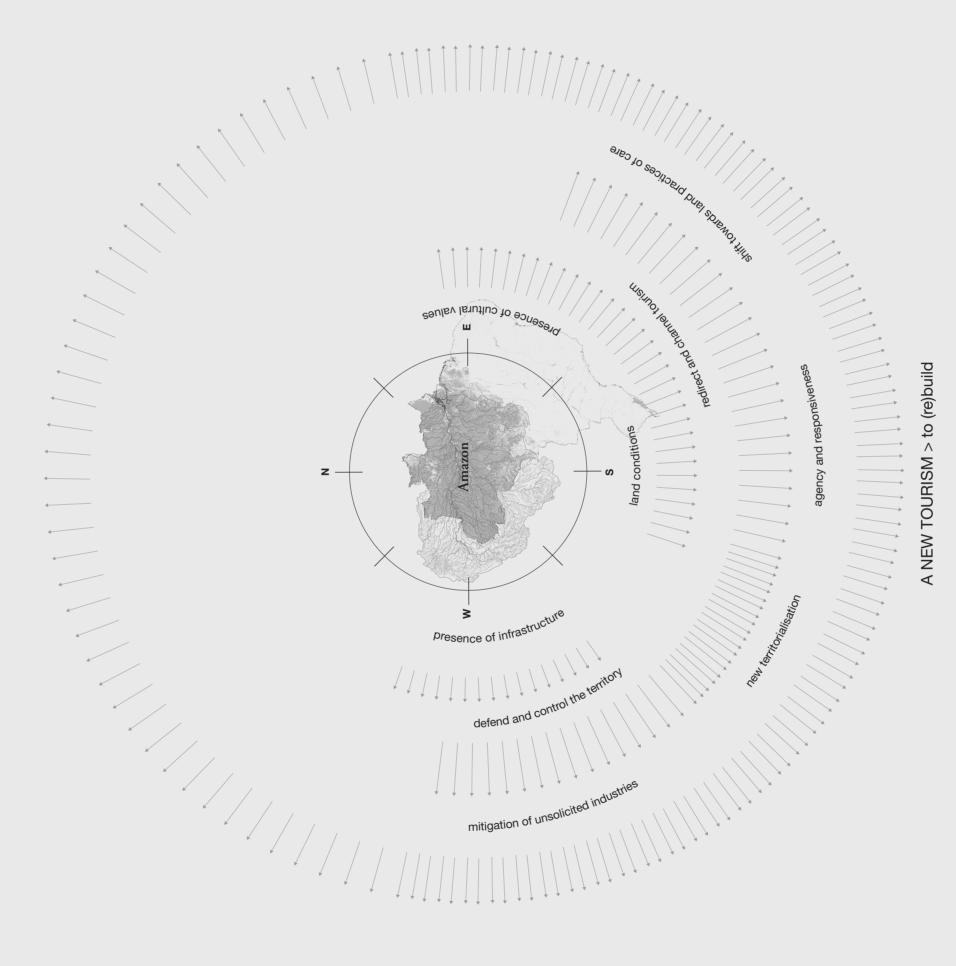
Based on the research and explorations carried on so far, this thesis will reflect on the projective and design goals that could possibly respond to the complex context described. As presented, tourism holds the strings of many topics in many spheres. In this project, tourism is related to discussion of the physical infrastructural plans, a colonial imaginary and discourse on the landscape and mostly, the operation of spaces and systems that result in specific conditions and practices.

In fact, the project aims to critically address and review the means in which large infrastructural and development plans are reflected in the reality of pristine territories — which often operate on more vulnerable systems. Understanding the Amazon as a Territorial In-Between offers the possibility of mediating the alignment on both ends: either by carefully modifying existing physical infrastructures and by reinforcing the upscaling of policies and governance structures that will empower indigenous communities in decision-making processes. In this sense, the project mediates the coexistence and interplay of hard infrastructure and soft infrastructure in Alter do Chão extended territory, and propose a more symmetrical and horizontal structure.

Therefore the project sets its two main goals: The understanding of the (type of) territorialisation that takes place when accessibility is granted a first intention to be set: to defend and guide the territory through accessibility containment, mitigating a larger network of mass tourism access and avoiding unsolicited industries' presence. Intervening on the existing mobility infrastructure, allows it to work as a defence mechanism, protecting and preserving the territory's wholeness.

Secondly, after underlining the importance of up-scaling original communities' agencies on the territory, the project sets its second objective: to redirect and channel the force of tourism as a catalyst for restoration and co-producers in the shaping of the site. This implies a fundamental shift towards activities that collaborate with land practices of care, maintenance, and management. By strategically redirecting tourism towards areas identified as degraded, under the leadership of original communities, the project aims to grant original communities greater agency in decision-making and enhance their control over the territory.

Simultaneously, by restricting accessibility and stimulating a robust social, cultural and governance system, the project ensures the creation of a new territorialisation of restoration, creating a framework where communities can expand their influence (territorially, economically and politically) while fostering sustainable practices. This dual and gradual approach into infrastructure, promotes a symbiotic relationship between the land and its stewards.



Design

7

# A TAXONOMY FOR A TRANSCALAR AND EVOLVING DESIGN

The previous chapters illustrated in detail the methods conducted so far to explore the tourism paradox in multiple scales, multiple media means and at different points in time. Although this allowed for a complete — and rather complex — overview, it also created difficulty in abstracting it into an intervenable model. The presented taxonomy below illustrates the structure in which this thesis will be organised around, abstracting research into tangible *scales* and *systems* that allow intervention and presenting their *challenges*.

#### **SCALES**

In this project — as already defended in the previous chapter — tourism is seen as a multi-scalar topic, since it relates to both national and international scales of planning, as to effects and discrepancies on the smaller scales.

#### **SYSTEMS**

As the topic of tourism was addressed using two main bodies of argumentation (accessibility and local empowerment), this allowed a more direct transferability research-design. Here, accessibility is translated to the system of mobility and its physical elements: highways, streets, waterbodies for navigation, etc. Aside, agency is translated into the system of land practices, illustrating the sphere of site sensitivity, its physical conditions, processes, and tools and how this combination operates the land. In between, mediating both systems, we find the system of governance, which is an intermediate of national and broader scales interventions to its physical repercussions on the physical site and processes.

#### **CHALLENGES**

The reading of each of these systems, in an analytical way also highlights the main challenges to be faced. These clear challenges allow the creation of clear actions that respond to them. On that, the project follows a structure of three axes of intervention: *Strategies, Ethos* and *Processes*. They have a gradient of rigidity, in which *Strategies* relate to unnegotiable protocols that respond to large-scale urgencies. *Processes* respect an adapting and evolving mode of operation that is site-sensitive and responds to land conditions. Once again, in between, the system of governance is reflected in an *Ethos*, a model of commoning, that orchestrates the alignment of large-scale strategies to their application on via processes.

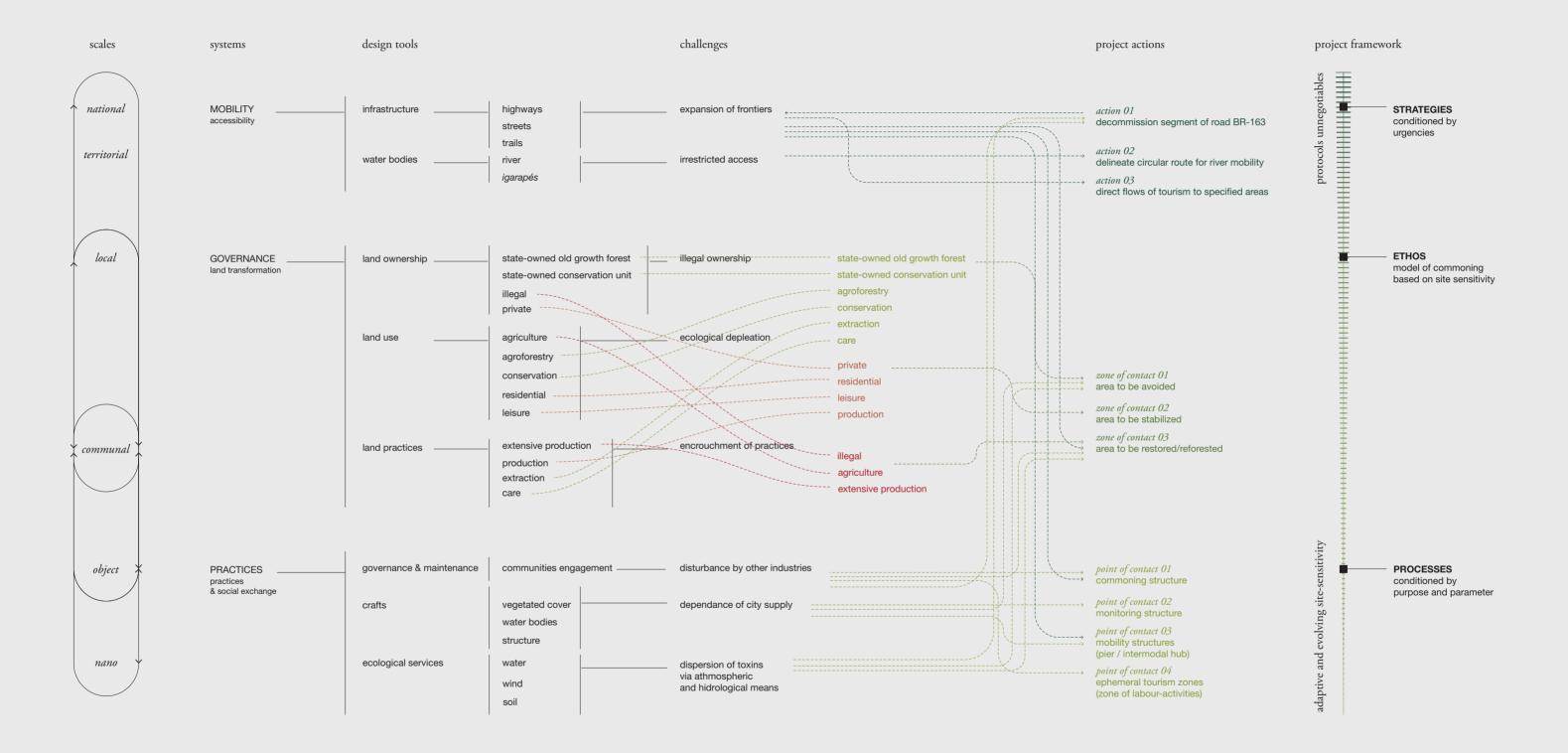
Important to notice is that this structure aims to highlight the crucial interplay between smaller-scale conditions and national strategies. The clear correlation between local practices and national plans underscores how large-scale strategies directly impact and shape small-scale practices. And, in fact, how small-scale practices and land conditions also directly inform national plan.

How can we position "care" as an integral value within the city's architectures and infrastructures of criminal justice, designing systems and spaces for restoration rather than retribution?

(Mattern, S., 2018)

In alignment with Chapter 6 *Intentions*, in which it is clearly outlined and described the goal of mediation of the territory: the project proposes a necessary physical framework while reinforcing and upscaling governance structures. In that sense, the mediation of governance via Ethos (proposed in this framework) clearly demonstrates a need for a reflexive, critical and open-ended model of governance, that is able to dynamically "open up" or "close down" the policy space (Feindt, P. H., & Weiland, S., 2018).

Important to highlight is that, although land ownership, land use, soil quality, and practices in place, are enlisted as a set of conditions to be cross-related, clear trends and patterns of correlation can be observed. On that, this thesis aimed to abstract the numerous variables that are in dynamic on-site. Due to the complexity of the research, the multiple actors, interests and means of existing, believing, cultivating, and occupying the land, the territory becomes a relation-based mesh that responds to each of these topics. This underscores that territories should be approached with less polarization and duality, but rather with a recognition of gradual shifts. The following Chapter aims to understand a way of reading this complexity and abstracting it into tangible parameters.



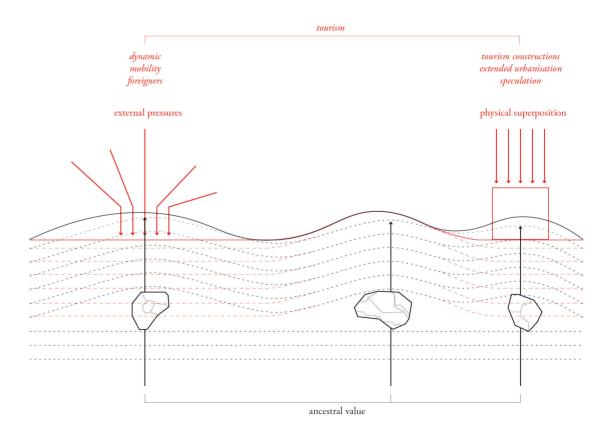
# A TOPOGRAPHY OF VALUES

Topography of Values was a research method created to answer to the complexity of the site. As presented in the previous chapter, the site responds to a series of conditions, definitions, possessions, and practices.

As clearly described so far, this thesis sets its tone under a critique of neo-colonisation and all its current narratives - in the case of this thesis: tourism. On that, the method of Topography of Values takes the side of original communities and the defended theory of Altered Nature. In the Amazon, the proof for this concept bases itself on the presence of ADE (Amazonian Dark Earth or Terra Preta de Índio, in Portuguese). The nomenclature in Portuguese clearly translates what this stands for, while the English translation lacks on describing it with precision. Terra Preta de Índio in free translation stands for Dark Earth from Indigenous People. The dark earth soil, in theory is the enriched soil with human intervention. In this specific case, the soil was enriched throughout the past millennia with ceramics, ashes from land practices and the cultivation and domestication of plant species.

Despite the detoured technical explanation, the Topographies of Values are a literal translation of this concept into visual production. The concept of ancestral value adding up to the soil was translated into the model to represent the existence of traditional land practices creating metaphorically a topography of value (cultural or ecological, in this case). In opposition to that, the model becomes flat when under the influence of practices that are superposed or pressured into what was originally there. The flatness or even the cavity translate that the territory is, in the aftermath, oppressed by external forces.

This method was essential to bridge the gap between the enormous quantity of information collected during the exploration phase, into qualitative, tangible and spatial information. This, furthermore, will inform the design on locating its interventions.











#### **PARAMETERS**

This section aims to explain how a parameter-based method was used to translate empiric information collected during research phases into qualitative information. The development of the parameters allowed a reading of the site without the need for spatial precision or locality-based analysis.

The following section explains which criteria were used and how the material was abstracted back to academic and formal structures, in order to bring this ethnographic and explorative knowledge into systems and scales tangible to the urbanist skills.

The material used to assess the site follow a more sensitive approach. The method collects material of time analysis of land-use (chronological and historical research), land ownership and proximity of frontier expansion (time x space development of the area); as well as deep analysis of cultural connection to Nature and original practices (ethnographic, anthropologic and metabolic evidence of traditional land practices). These parameters collected imagetically and verbally during research and fieldwork phases, were translated into a topography of values.

Addressing that the area would be translated into low or high values depending on their performance and assessment of cultural ecological values. On that, some similarities and patterns were observed and this allowed to understand the a common condition of Low, Medium and High cultural-values.

A parameter-based approach helps to inform the site condition and to better project interventions according to the needs of each area. Moreover, it provides a clear outline of the capacity and skills of each area and community. In this sense, Indigenous communities and their land can be critically assessed on matters of human resources, skills, local expertise, responsiveness and site conditions. This allows to a local delegation of governing roles.

#### LOW VALUES

Such areas reveal the presence or proof of ancestral value but are conflicting with the presence of extensive agriculture. Therefore, they are areas with exceedance of external intervention, invalidating and oppressing cultural ecological practices. Usually marked by:

- high level of forest deforestation
- \_encrouchtment of traditional practices
- displacement of original communities
- tourism-dependent
- \_dependent on tourism imaginary (use of postal cards, picture spot, etc)
- tours are organized by foreigners
- \_local produced goods consumed 100% by tourism
- \_tourism has unrestricted access to land
- \_low cultural resistance: exclusively working on tourism activities only (discontinuation of traditional practices)

#### MEDIUM VALUES

Such areas reveal the presence or proof of ancestral value but conflict with intense tourism dynamics. These areas showcase the presence of external intervention. This parameter takes into consideration specifically the evolution in time, analysing the vector of expansion of the frontiers and the increase presence of tourism. Positively, although present, tourism is not unrestricted. These areas are usually marked by:

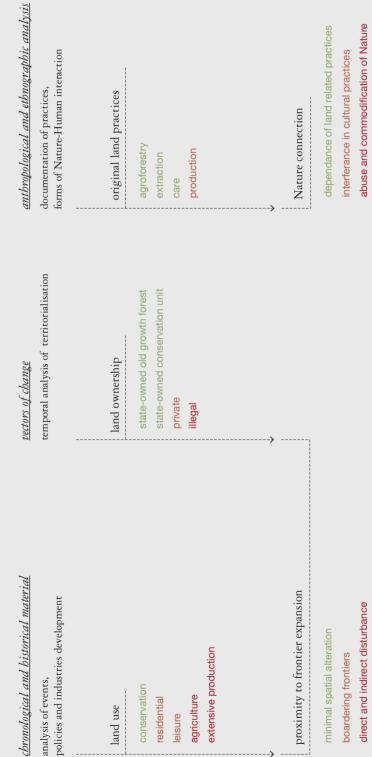
- \_forest deforestation in the frontier of expansion
- tourism presence
- \_tourism activities that portray the tourism imaginary
- offer of other cultural activities
- presence of cultural resistance
- \_continuation of land-related practices
- \_sense of community and ownership over land

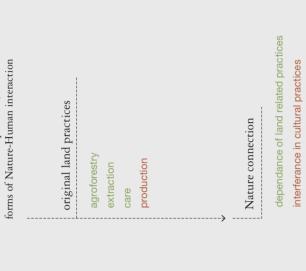
#### HIGH VALUES

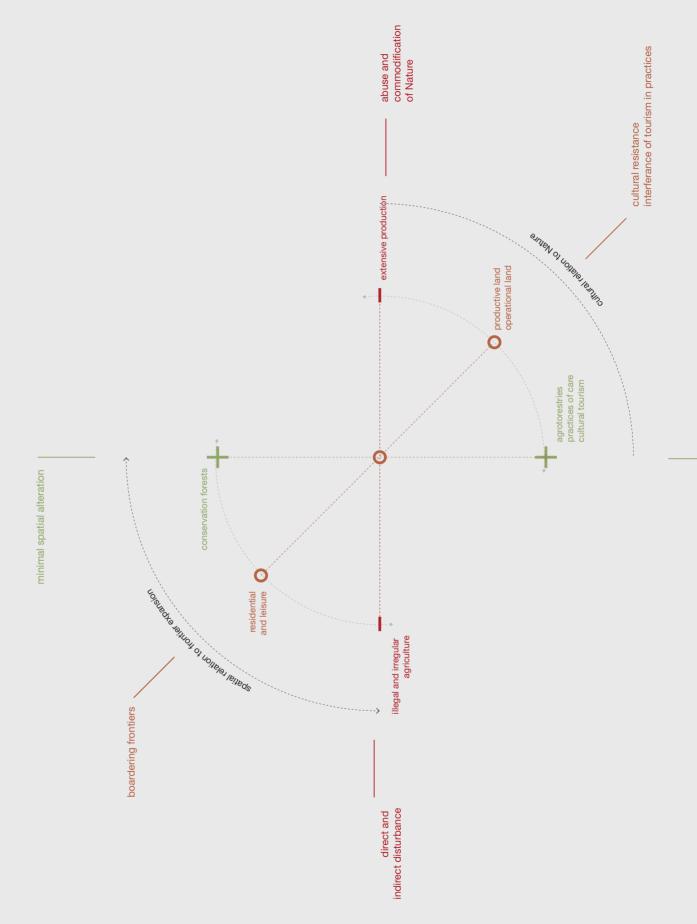
Such areas reveal the presence or proof of ancestral value in alignment with a preservation state due to the commissioned land (Conservation Units). Areas like these, have the slightest presence or complete absence of external interventions. Expansion of frontiers, vectors of change are almost null, creating an idea of that the area is static in time. And, although tourism is present, it contributes only laterally to the site, not being its main economic provider. These areas are usually marked by:

- \_forest deforestation is minimal
- \_area with low built growth or spatial change through time
- \_tourism barely present
- \_tourism activities that resonate with the area's routine and daily activities
- \_highly cultural
- \_dependence on land-related practices
- \_sense of community and ownership over land
- disconnection to modern beliefs and appliances

# A PARAMETER-BASED APPROACH







#### STRATEGY I ROAD DECOMMISSION

The matter of accessibility, extensively described in Chapter 4 Tourism through the lenses of colonialism: discussing accessibility, highlights the challenges of frontier expansions and irrestricted access to land. As presented in the scheme from 8.1 Taxonomy for transcalar and evolving design, the analysis of the system of mobility will depict where to constraint accessibility. Intuitively linked to the intention of the design: mobility will be the means of defence to territory.





fig. 30 and 31

Satelites for neighbouring plots of BR-163 highway

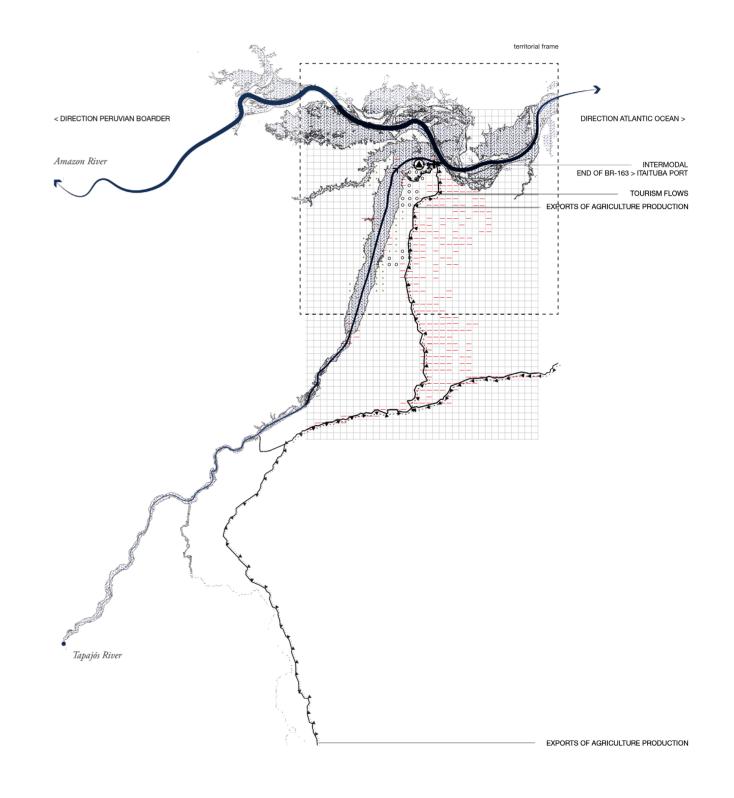






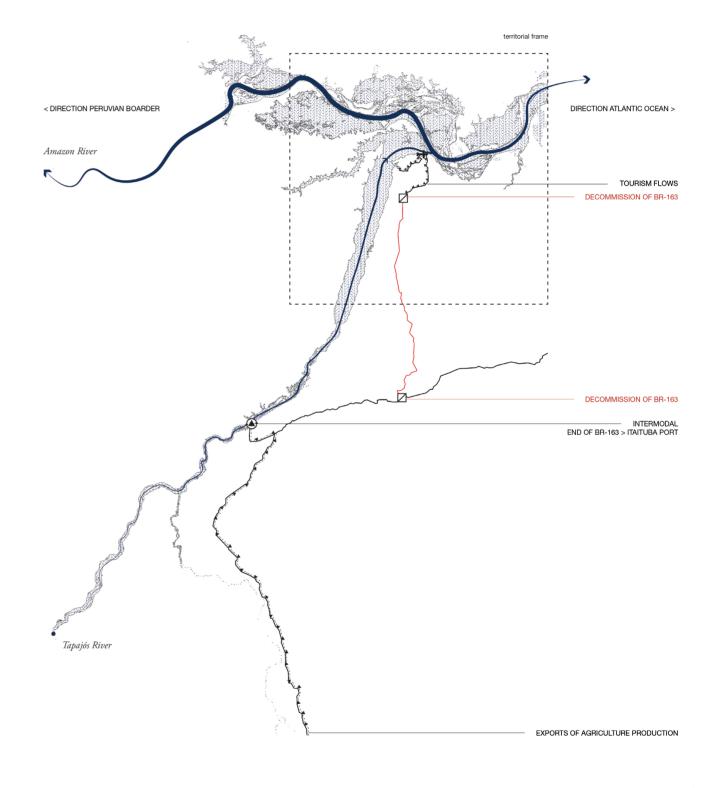


fig. 32, 33 and 34 Seeding, closure and decommision. Source: Handbook for Forest, Ranch, and Rural Roads, 2015

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Responding to deforestation and the unsolicited presence of industries, the first intervention reacts to this urgencies. The proposed intervention reads the system of mobility in its territorial and national context. Understanding that this road is the artery of export of Brazil's agricultural productions, the project proposes a relocation of the current intermodal spot (road to port) to Itaituba. Itaituba is already a port facility - with a bigger capacity than Santarém. By shifting the logistical flow to Itaituba, the proposal guarantees to free 331km and 5h of drive from the export chain.

Furthermore, after the relocation of the intermodal spot, the project proposes a decommission of a fragment of BR-163. From Rurópolis to Belterra, 173km are decommissioned. This implies that all unsolicited activities that take place lose their direct link to the road and tourism routes are restructured by the river or by alternative routes (both will be further explained on the following pages)



#### SYMBOLIC OPENINGS

The highway BR-163 is a narrow line that crosses 3579 km of Brazil, from South to North. Although its abnormous length and speculative consequences, the highway itself does not damage its surroundings. The narrow profile and delineated footprint, avoid major degradation. However, as with any other highway, the BR-163 has straight routes that most of the times superpose over Nature's conformations.

Parallel to that - and as explained in Chapter 2.3 *Notions on Nature:* The Amazon as an Altered Nature - cosmology is a normative belief in the Amazon. Nature, in this case, springs and streams are embedded in religious and mystic beliefs and materialise their Gods.

To decommission the road while acknowledging that the road itself is not the main issue, the design proposes symbolic openings to alleviate conflicts. Specifically, in the section from Rurópolis to Belterra, where the road crosses springs or streams, these symbolic openings are suggested. By carefully dismantling the road at these points, the project aims to respect local beliefs about Nature and its spiritual significance. This approach not only disrupts the road's connectivity without requiring extensive decommissioning materials but also emphasises the importance of subtle actions.

"We should also remember that the preservation of our world - the human one - is sometimes at odds with caring for the ecological context. Perhaps not every road should be repaired. Geographer Caitlin DeSilvey encourages us to embrace entropy within the built world, to ask ourselves for whom we engage in preservation, and to consider cultivating an acceptance of "curated decay" where appropriate."

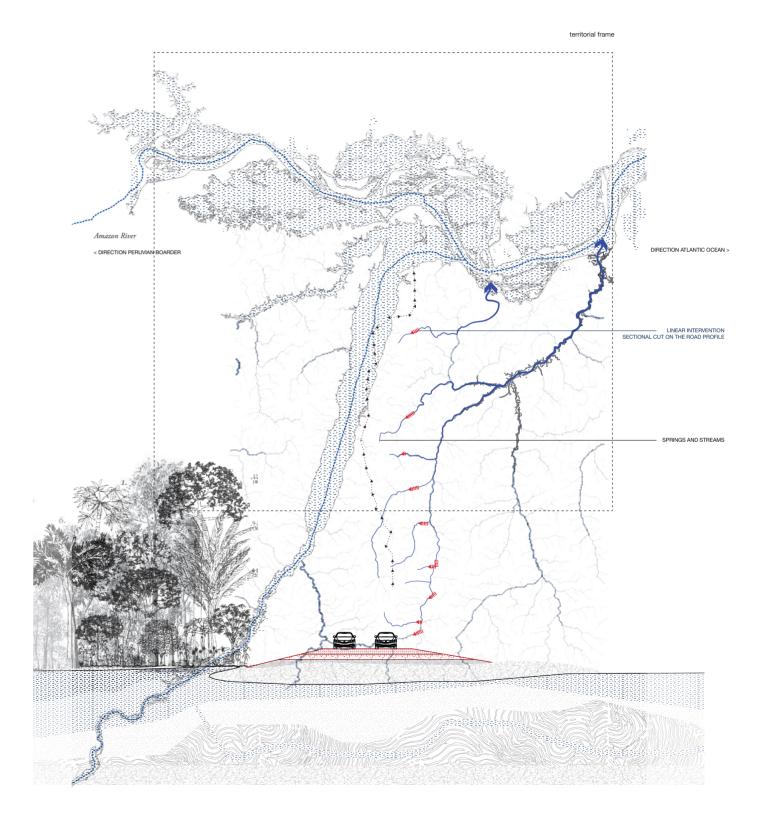
(Mattern, S., 2018)





fig. 35 and 36

The overposition of roads over igarapés in FLONA Conservation Unit. Source: Dana Bernard Merrill, 1911



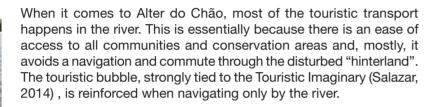
STRATEGIES



#### STRATEGY II RIVER ROUTE OUTLINE

As a second intervention, Strategy 02 aims on addressing the mobility issues on the river. Rivers differ significantly from roads as means of transport essentially because they are natural pathways that require no construction or defined routes. Because they need minimal infrastructure (primarily boats and docking facilities), navigation on rivers becomes flexible, adaptive to natural conditions.

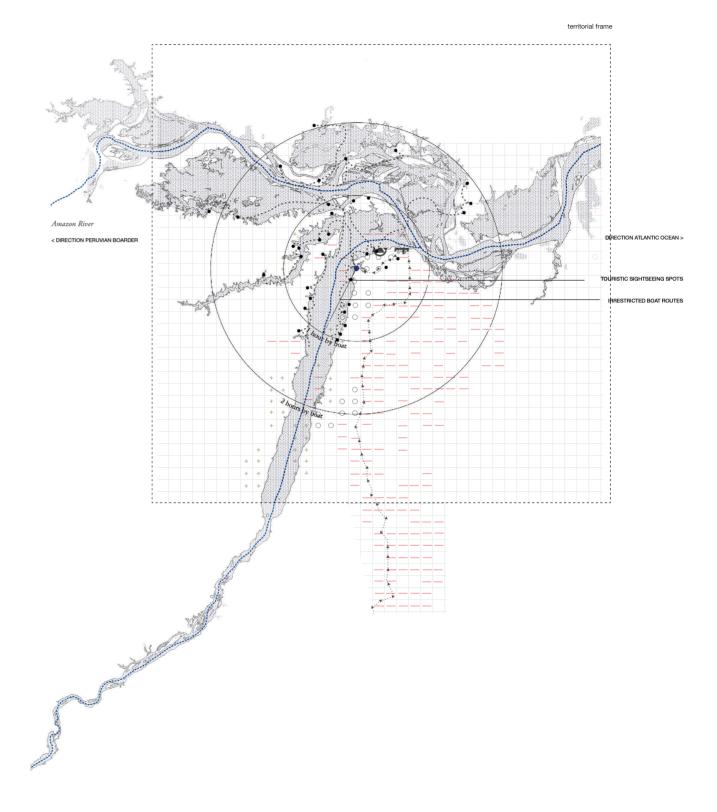
The lack of predefined routes and a certain rigid backbone, however, also means there is often more possibilities and unrestricted access.



Riverine communities, that bathe the river, are susceptible of access any time by the unrestricted control and multiple boat services offered in the village of Alter do Chão.



fig. 37 Fast speedboats in Alter do Chão.



N | 50 | 75 km

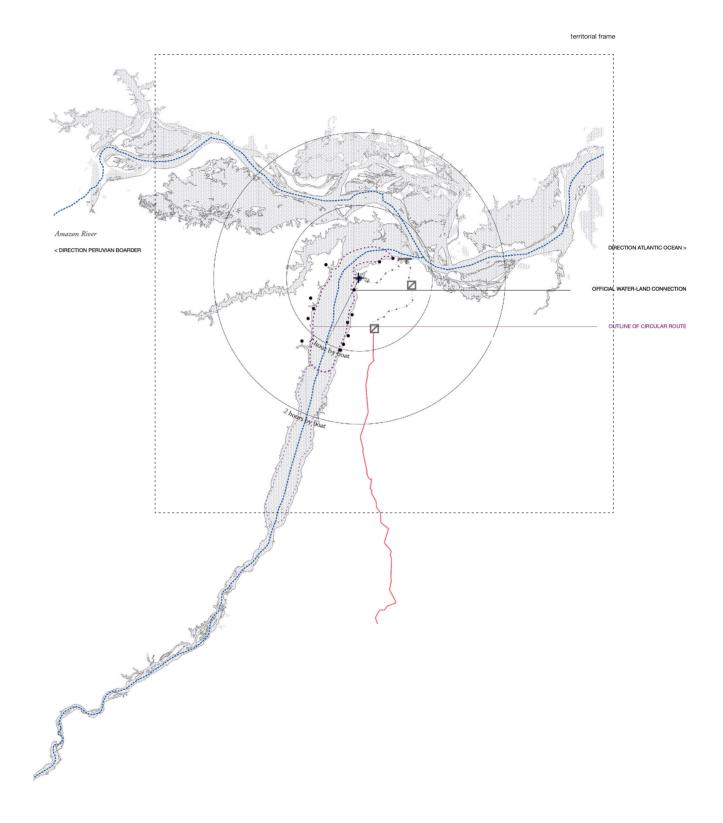


fig. 38 Community boats, collectively operated. Author, 2024

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On that, the design proposes a delineation of a circular route, operated from Alter do Chão that dock only on communities that are willing to engage with tourism. By fixating on a circular and singular route, the design aims to (1) increase the time needed in transit, as a means of discouraging fast-tourism masses; (2) control access to communities; (3) provide a uniform and constant flow of tourists to all communities equally; (4) officialise means, location and the calendar of tourism activities on preserved communities.

Overall, the condition of navigating the river is to follow communities' calendars and needs. By that, the design aims to not only equally share tourism benefits over the territory but to instruct orderly small communities which hold less resilience how to live with tourism.



N | 50 | 75 km

#### STRATEGY III **DEFINITION OF NEW TOURISM ZONES**

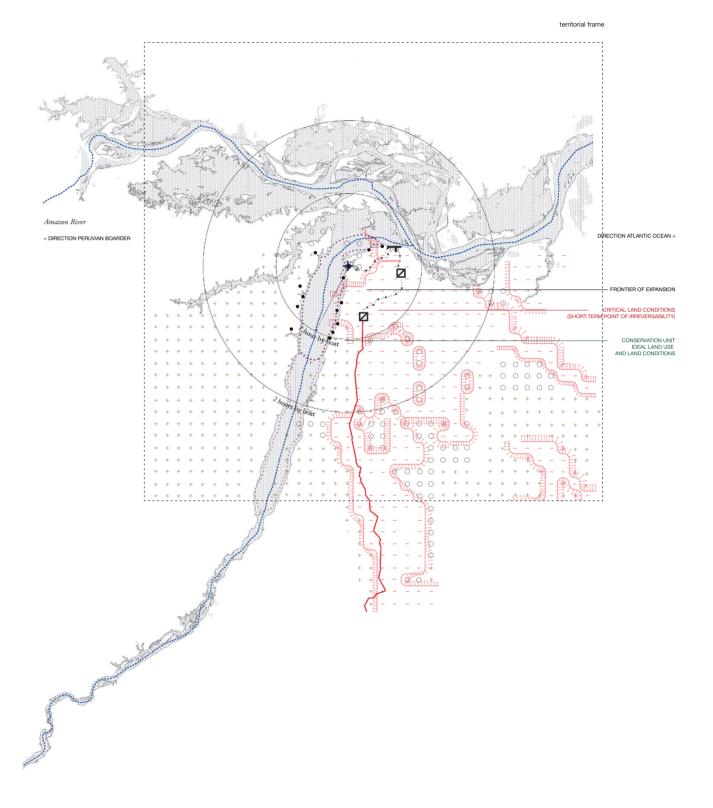


Dawn after fire at the BR-163. Source: fig. 39 Marizilda Cruppe, Amazônia Real, 2020

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This thesis has highlighted so far the dual tone in which tourism operates: partly as a neo-colonialist territorialisation, partly as stimulator of local agency. Apart from territorial defence, another main intention of the project is to redirect tourism efforts (physical, economic, territorial...) into areas that are under cultural-ecological depletion. This implies that tourism localities are redirected to zones that have specific land conditions and land ownerships (as per visualised in the scheme from Chapter 8.1 Taxonomy for transcalar and evolving design. On that, a fundamental shift is needed: not only on changing the expectation, imaginary of what will be seen, but on acknowledging tourism's needs to become accountable for its presence. Therefore, a major change towards activities that collaborate with land practices of care, maintenance, and management is needed.

In this spatial proposition, areas under illegal occupation and ownership, irregular cadastre and agricultural reversion land are targeted as possible areas to be reclaimed. This trade-off framework will be explained further in Appendix IV Transitioning economies of the Amazon. It is relevant to highlight that the spatial design and outline of new areas, follow a logic of the frontier expansion. Trying to direct respond to this issue, the new zones are allocated at the border of the frontiers, as means of becoming bodily limits to the frontier expansion.



STRATEGIES





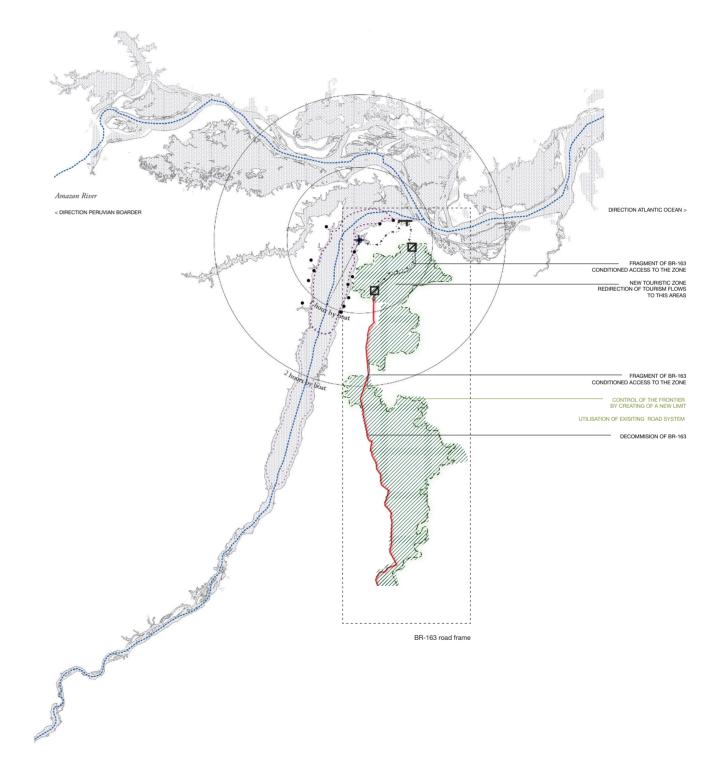


fig. 40, 41 and 42

Restoration project, Inhotim.

By strategically redirecting tourism towards areas identified as degraded, the project aims to direct tourism's forces and investments into a new frame. In this scenario, the lack of imagined landscapes favours the construction of a new one. Tourism works in synergy with local communities to the regeneration of the forest, learning, practicing and experiencing it on-site.

In the next chapter, theories on governance will be explained, in order to envision a possible governance model in which these new zones of tourism, in practice, allow the stimulation of agency and decision making into the territory.



N 0 | 50 | 75 km As addressed in the previous chapters, new tourism zones are zones of reclaimed land that apply the new governance model proposed by the project. In fact, they depict how the effectiveness of the project relies on the synergy between hard and soft infrastructure. The first, with the provision of the necessary physical framework, while the latter ensures these assets are utilized effectively for the population's benefit. In that sense — and cross-relating it to the taxonomy previously presented — new tourism zones are the interface of large-scale protocols into physical demonstrations on-site with a reflexive model of sensing the site.

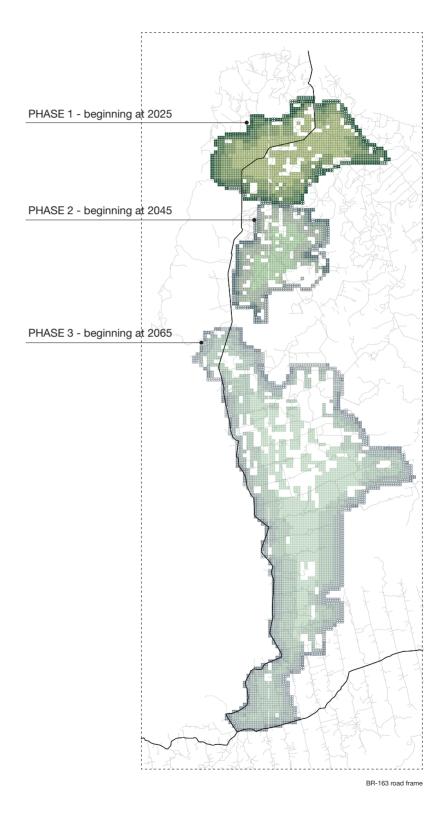
#### HARD INFRASTRUCTURE

Responding to urgent infrastructural needs, hard infrastructure is structurally redefined by the project. This involves the new outline of tourism flow after the containment of BR-163 road and the cessation of unregulated river circulation (*Strategy 01 and 02*). A new limit is created where tourism now takes place, this physical border now meets the former agricultural frontier (*Strategy 03*).

#### SOFT INFRASTRUCTURE

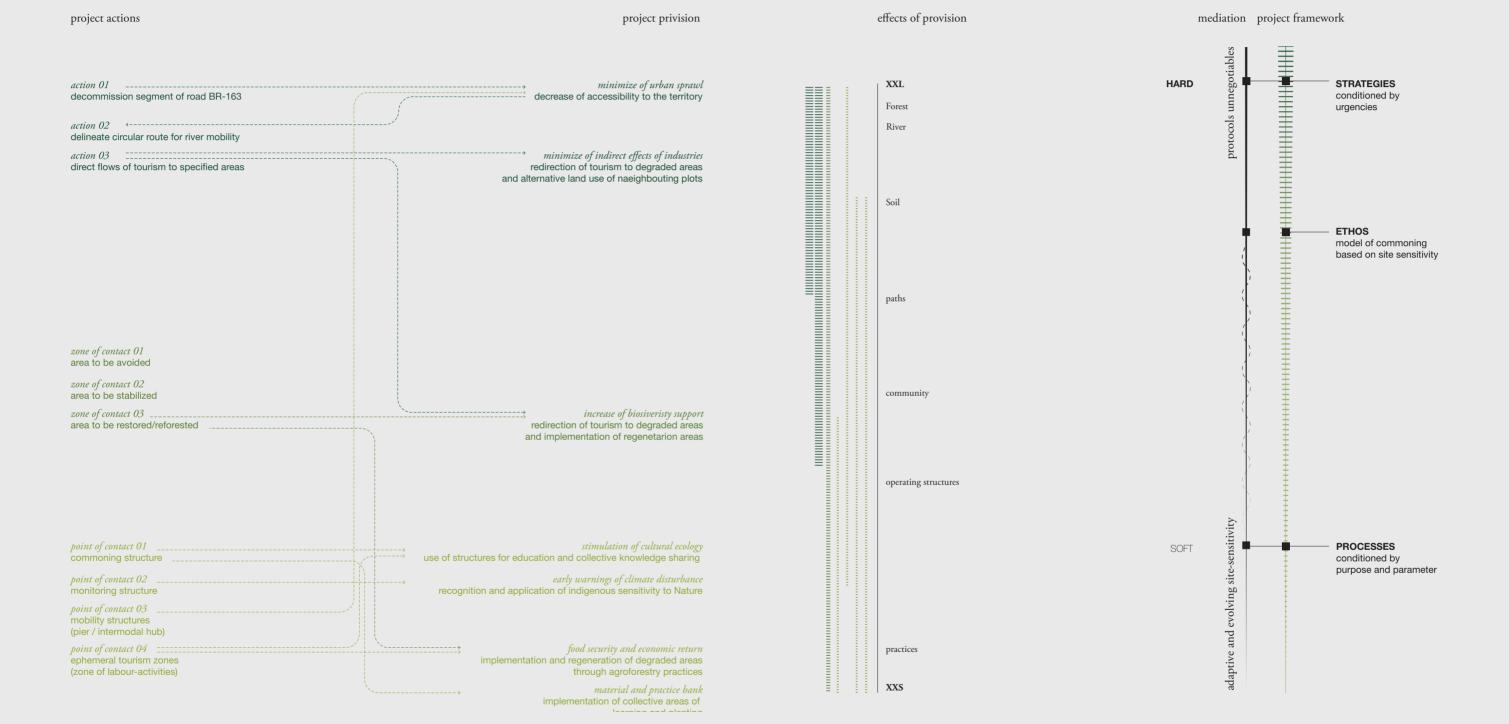
This includes reviewing hard infrastructure implementations to allow tourism to reach the new zones and repurposing reclaimed land for care and retreat practices. This demands an assessment and management of the site with sensitivity to cultural and ecological conditions (*Reflexive governance model*). This land-use-reversion benefits communities by granting them collective land management and proposing infrastructure that allows an alternative programmatic that nurtures life (human and more-than-human). A zone where tourism and the community collaboratively engage in land care, retreat and maintenance practices.

The following pages, display three selected zones that portray different combinations of current land conditions and will depict how the design suggests mediation and care. Following the Chapter 7.3 *Parameters*, the design of zones will assess common combinations and explore the conflicting dynamics between each.



0 |10 |25 km

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STRATEGIES

9 Ethos

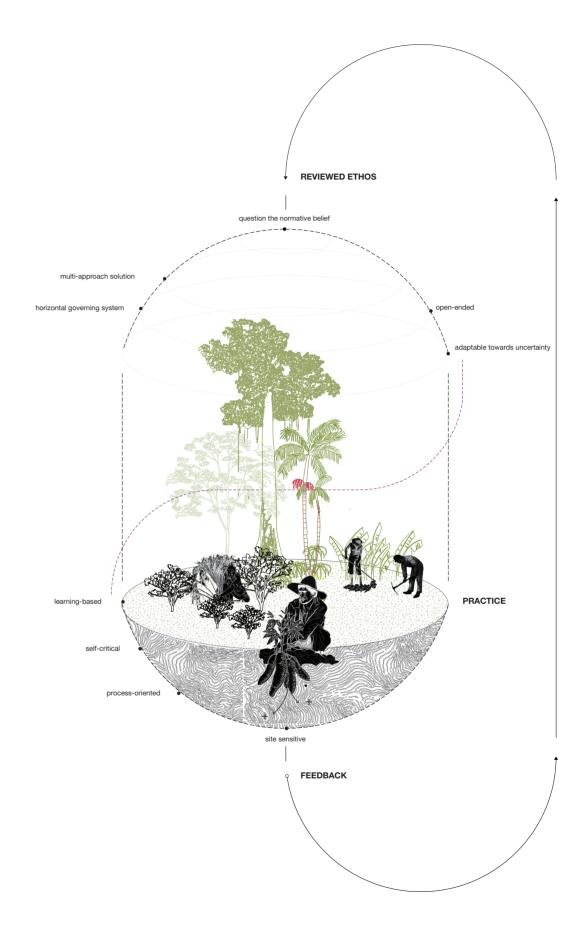
#### REFLEXIVE GOVERNANCE

"Often overlooked, the materialities of infrastructures and everyday practices that are the object of sustainability transitions also embody contingent power relations: 'the politics of materiality is located at the interface between governing regimes and practices on the one hand, and sociomaterial arrangements on the other hand' and 'located at dispersed geographies and everyday social practices' (Feindt & Weiland, 2018)

When discussing the means of governance, introduced by the framework as Ethos, a model of commoning, the concept of reflexive governance stands out as a direction. Reflexive governance (Feindt, P. H., & Weiland, S., 2018) addresses the limitations of traditional environmental policies by focusing on adaptive and self-critical approaches to governance. It emphasises the importance of incorporating process-oriented, self-critical models that generate feedback. This practice-based governance serves as a means of informing - and questioning - normative beliefs and bridging site sensitivity to a governing and planning scale. In that sense, reflexive governance could help on advocating and implementing a more inclusive and adaptable frameworks that address the socioecological complexities and power dynamics.

"A second important influence was a conception of reflexivity as self-critical reflection that aims at examining its own assumptions and presuppositions (Stirling, 2006) and the effects of different problem conceptualisations on 'opening up' or 'closing down' the policy space (Stirling, 2008). [...] In this context, reflexivity denotes a mode of governance where cognitive procedures are designed to create feedback on multiple regulatory frameworks in order to influence actors' beliefs and norms. In reflexive governance, cognitive and normative beliefs complement political-administrative hierarchy and economic incentives as mechanisms for coordination."

(Feindt & Weiland, 2018)



#### CURRENT CONDITIONS AT ALTER DO CHÃO, BELTERRA AND FLONA

The images side depicts the condition of Alter do Chão village, assessed as medium on cultural ecological values, due to the superposition of external presence of tourists and overall urban sprawl of the city, causing local communities to be displaced to the outskirts.

Below, images showcase the agricultural fields in Belterra, as well as, resisting communities that still practice agroforestry models in between highly toxics agricultural neighbour fields. Belterra is assessed as low on cultural ecological values due to its extreme pressure on traditional communities.

Lastly, the images portray the communities inside the conservation unit of FLONA. The conservation unit status is assessed as high on cultural ecological values, due to its apparent disconnection to roads, streets and its residential units surrounded by forest and full synergy to Nature and land practices.



fig. 43 Map of Amazonian Dark Earth in the surroundings of Alter do Chão.







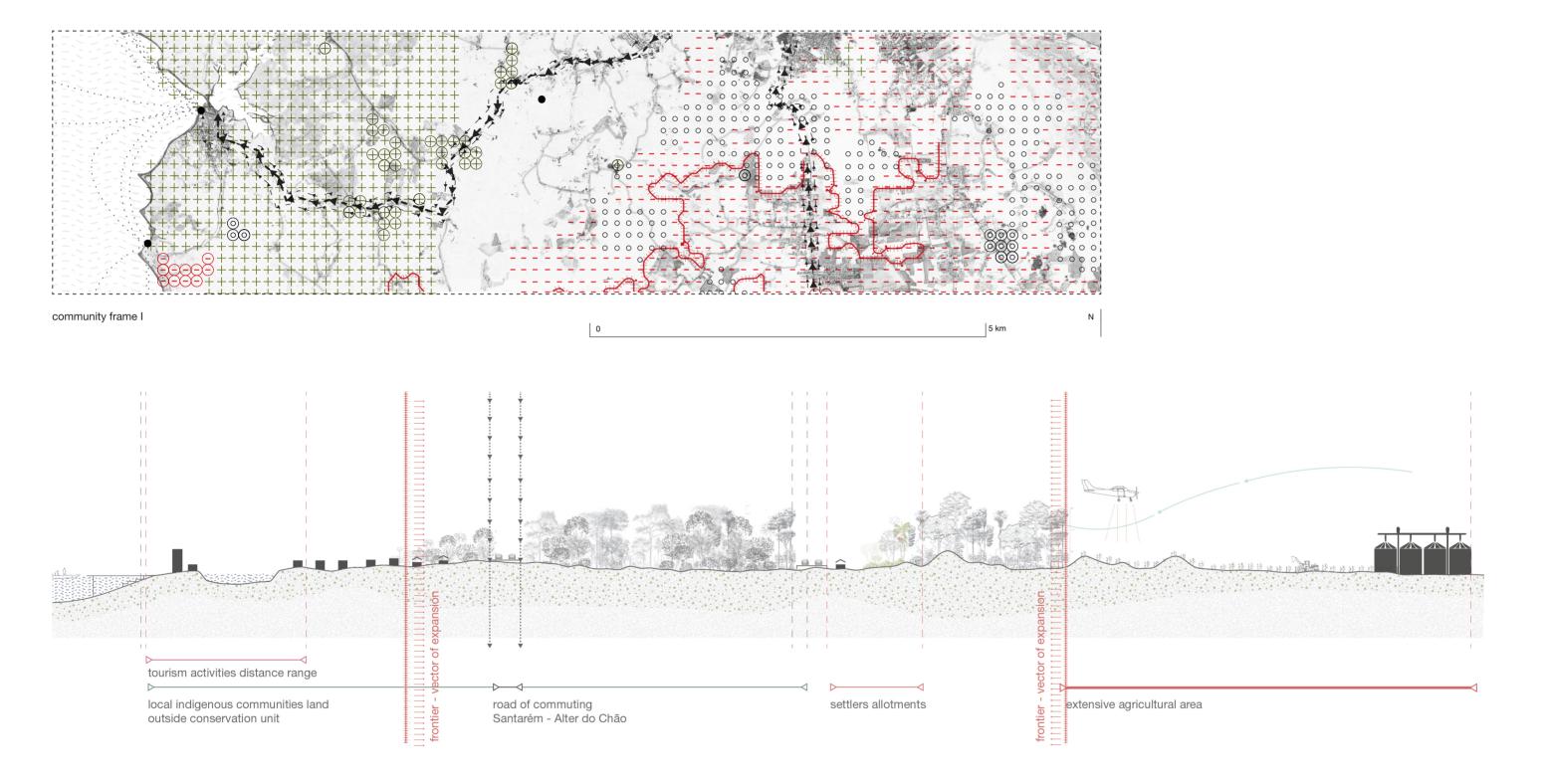


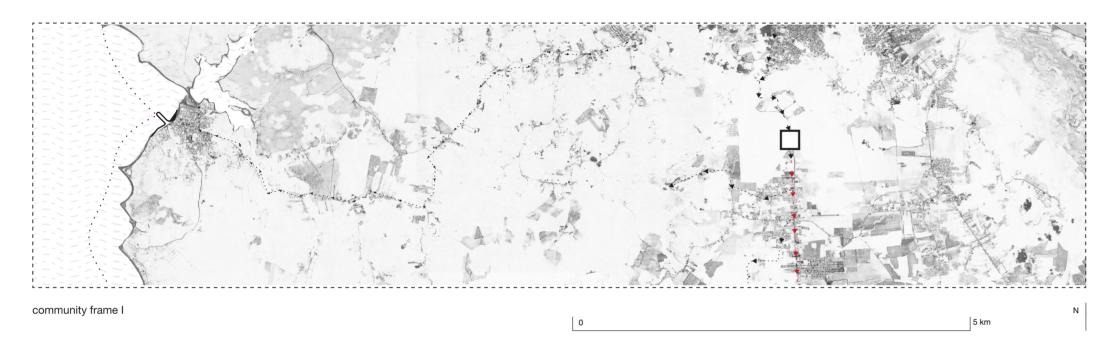


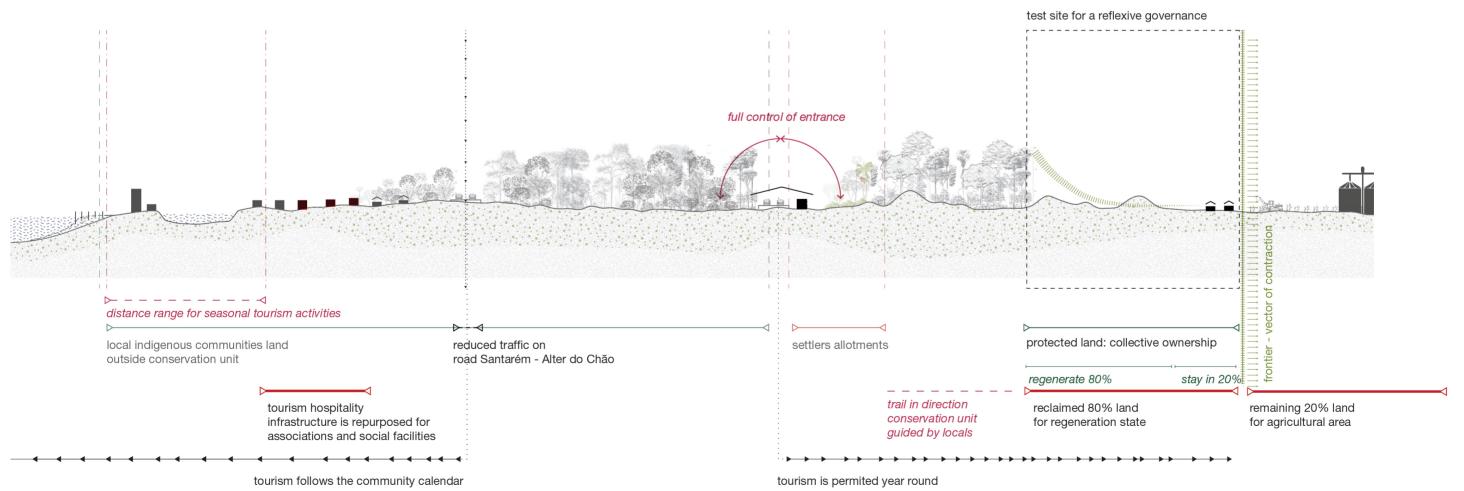


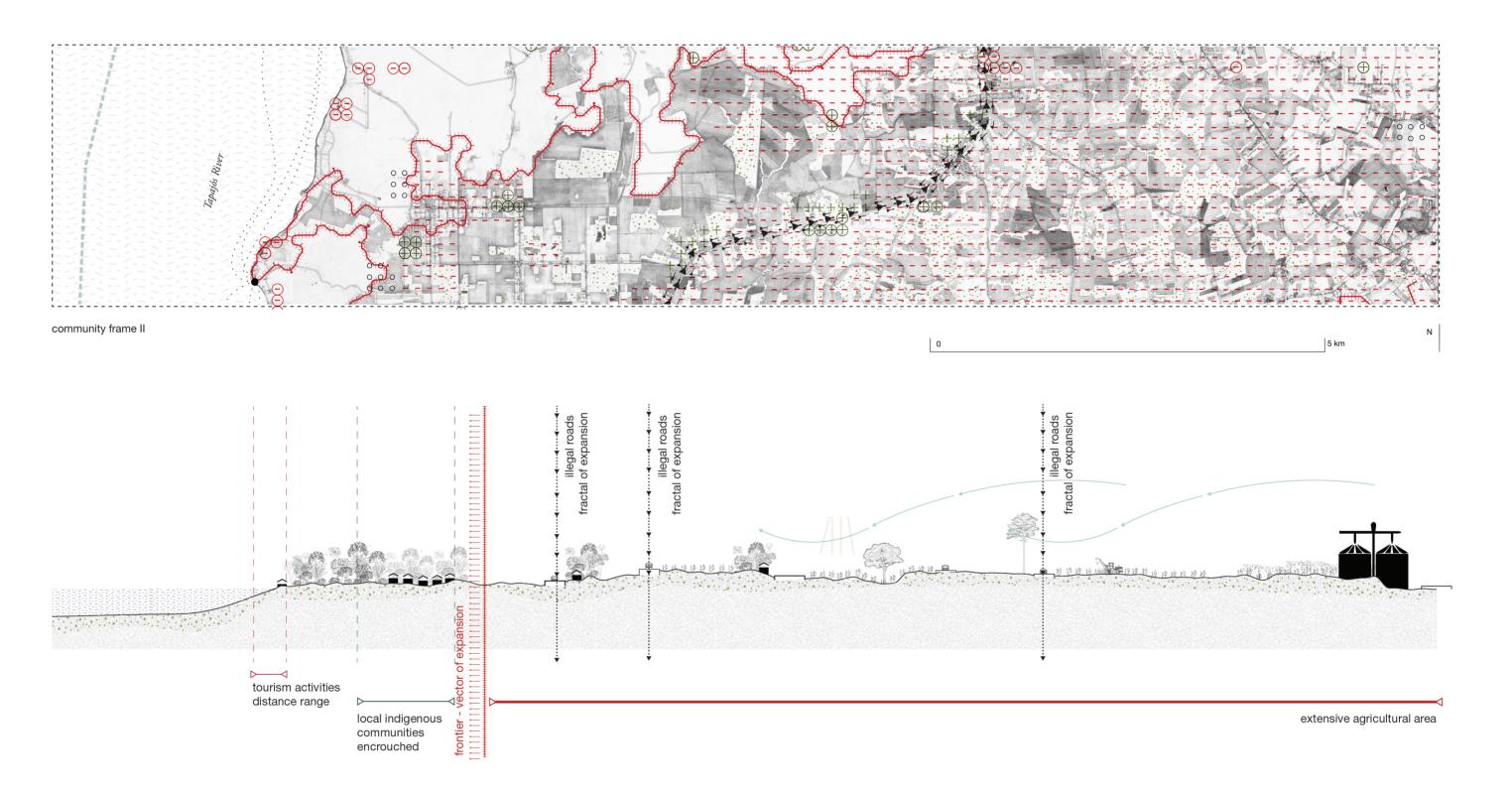


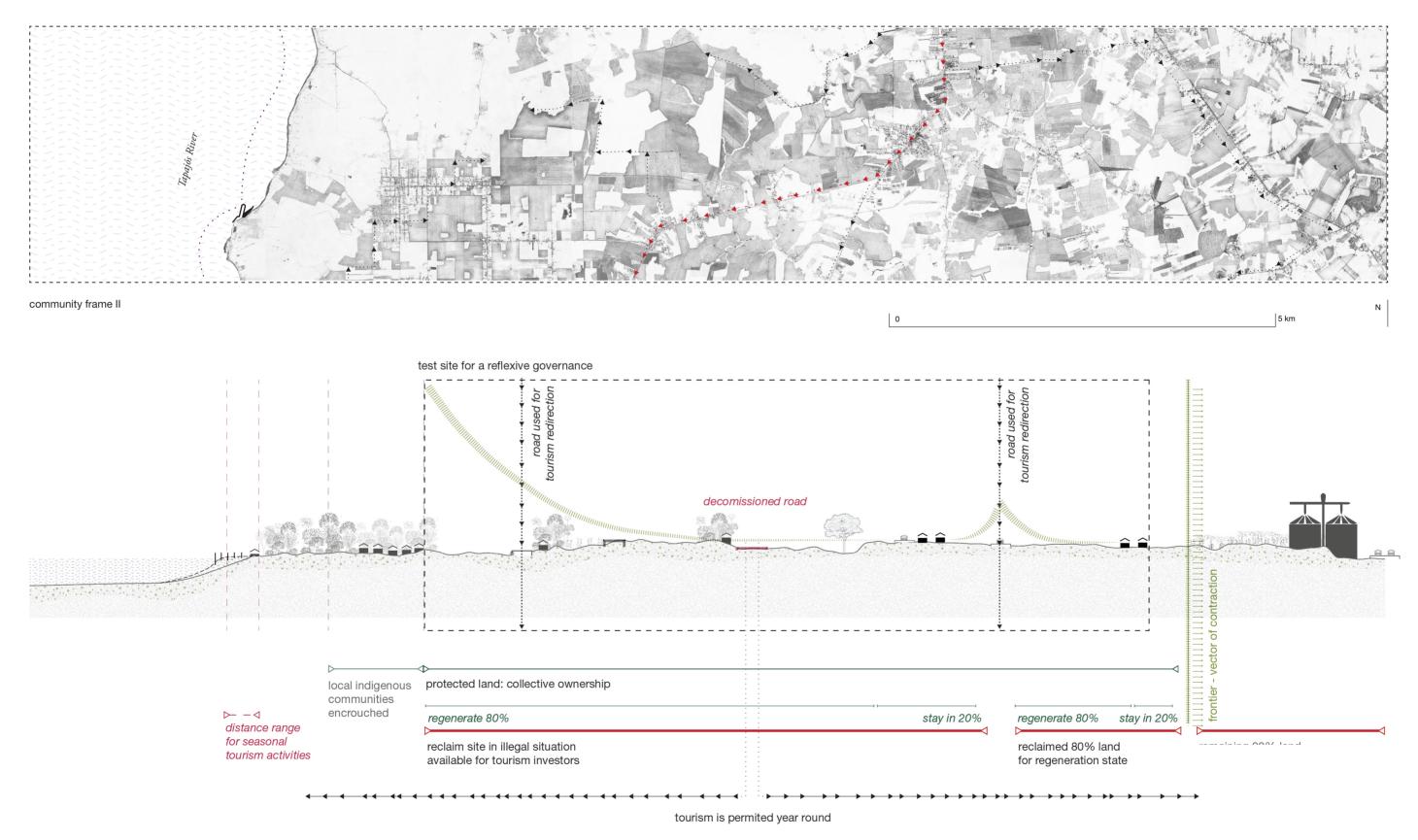


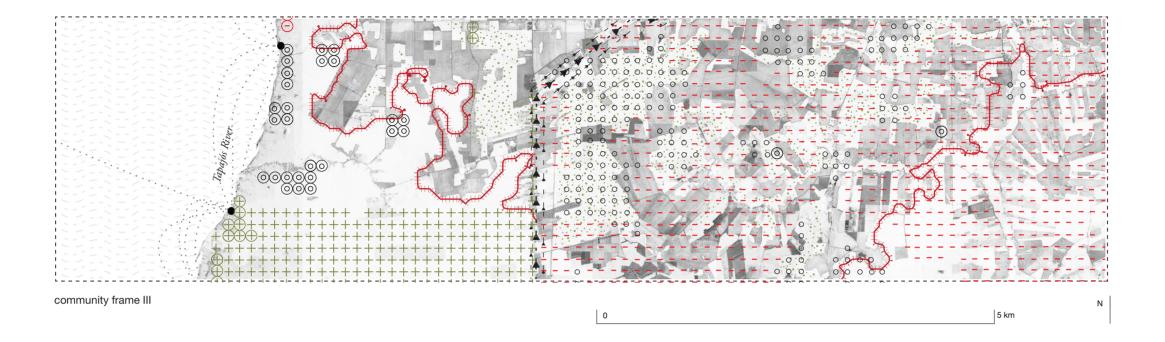




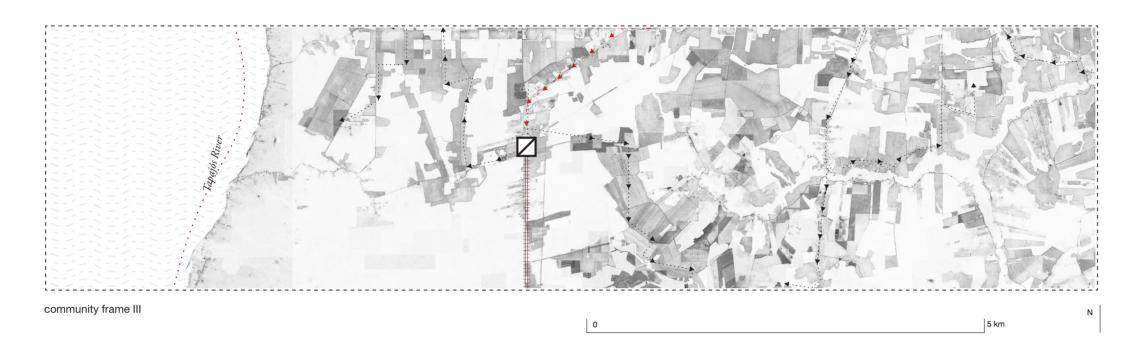


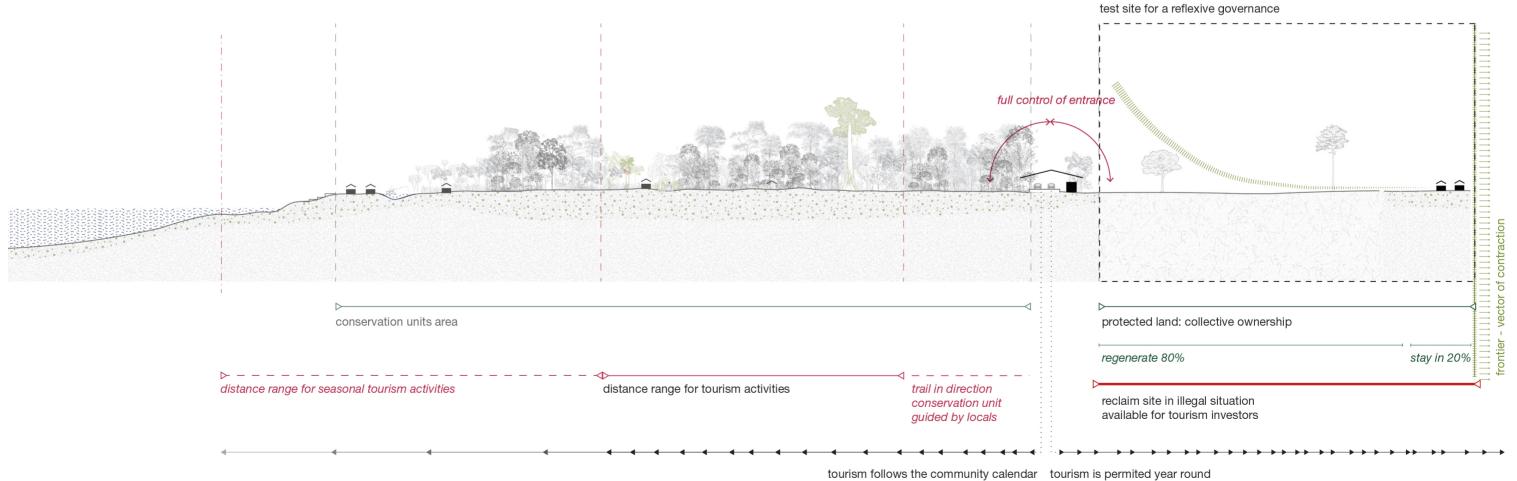












Processes

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## PRACTICES OF MAINTENANCE AND CARE

Throughout this report, multiple mentions were made about the indigenous way of action with Nature. This topic, developed initially in Chapter 4.2 *Tourism imaginaries: the landscape* highlighted how communities were not only in sync with Nature, in fact, considering themselves a part of it.

To that, more relations were drawn, especially related to the practices carried on by communities. In Chapter 7.2 *Topography of Values*, the project assesses the relationship between land condition and the methods of land care. It emphasizes the importance of highlighting the relevance and upscaling — spatially and representatively — such practices of care.

That said, this project relies tremendously on a shift and encouragement of processes and practices rather than on definite and finite solutions. The drawing aside demonstrates a compilation of practices carried on in different scopes of action, going from construction, regeneration, retreat, inertia, nurture and maintenance.

# SUPPORTING STRUCTURES FOR PRACTICES OF MAINTENANCE AND CARE

Could be said that practices can be operated without any built The proposed framework aims to bridge the large-scale infrastructure, governance systems and suggest a shift from practices of extraction towards practices of care. And although this thesis agrees on the "unimportance" of the architectural objects, it can be said that (infra) structures can ensure the effectiveness and long-term sustainability of the project.

Certain theorists help to develop this thought: in a theoretical conversation, Ellen Braae, Gilles Deleuze & Félix Guattari and Bruno Latour, all contemplate the idea of an interplay of human and more-than-human dynamics. Important to this project, is that, whether Braae (2015) shifts the focus from architectural products to the driving forces and exchanges that provoke change; Deleuze & Guattari (1987) build up on the disruptive dynamics to escape from established norms or Latour (2005) detailedly explains how various actors (materials, processes, ecological factors) interact and influence each other, all of them highlight the shift from object to the practice. From static conditions to dynamic interplay. From individual to collective, whether human or more-than-human.

#### INFRASTRUCTURE FOR LIFE

On that, this project reflects this positioning. The larger framework of this project proposed new areas of focus for tourism (*New Tourism Zones*) to be effectively linked to a symmetrical and horizontal *Reflexive Governance System*. This dual approach aims to create conditions for certain Programs and *Practices* to unfold and benefit the communities.

To ensure this mediative approach, the project relies on the suggestion (infra)structures which ensure that natural and human systems are in alignment with the preservation of the environment, the respect for the cultural heritage and rights of indigenous communities. Such life infrastructures would interface locals and foreigners, as well as humans and more-than-humans, focusing on their programmatic and material form.

Such structures, respond to the site conditions introducing to the communities and tourists the possibility of monitoring and performing practices of care. With a *dynamic* contribution to agency, they would allow a responsive approach to soil, air, and water pollution, shifting the *Zone* from an extractive condition to a regenerative one.

Following on the next pages, each structure of the proposed landscape (road decommissioning control points, infrastructure of access river-land, temporal units for tourism, minimal infrastructure for tourism) is presented.

# MEANS OF MONITORING: MATERIAL AND METABOLISM

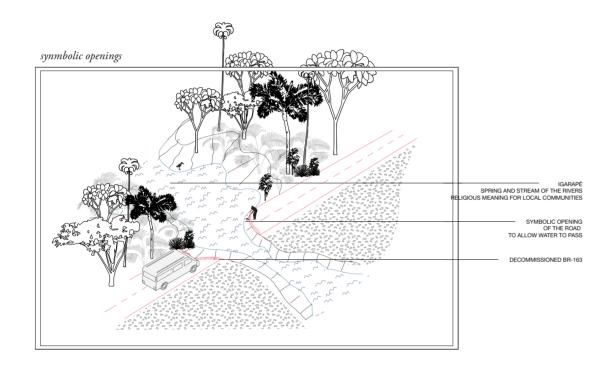
In this chapter, the project suggests means to address to sitesensitive conditions and intangible aspects, such as the basic elements and drivers of contaminations on site: wind (carrying agricultural chemical pesticides), water (carrying mercury from gold mining and altering acidity) as well as soil (heavily depleted by extensive agricultural practices).

The thesis, on its ultimate goal, aims to bridge the urgencies from the large-scale systems into physical and ecological reactions, that transfer into the architecture its symptoms. It does that by combining native elements, plants and species into the materiality of the built structures of new tourism areas.

Turmeric, red cabbage, lichens — species found in the Amazon — are applied to the materiality of each structure to be reaction indicators of soil fertility, water acidity and contamination as well as air pollution from pesticides.

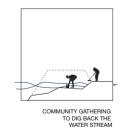
To add to that, materiality plays an important role in it. The design is aimed at material-to-soil construction. In that sense, the material to be used as structure is either dissembled for other uses or fully incorporated into the natural decomposition process. The project addresses that by defining each material from the soil composition, related to a soil composition section: sand, clay, red soil and black soil are the main materials to be used for construction. Wood and palm straws are additional materials to be incorporated, their supply comes from the clearing area in which the structure takes place.

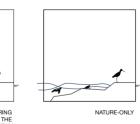




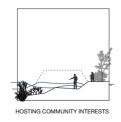


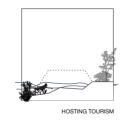




















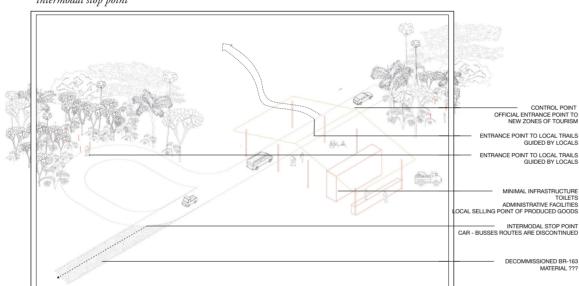








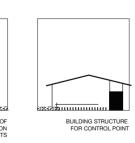
### intermodal stop point

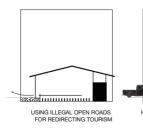






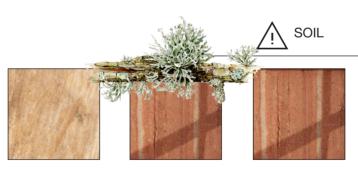












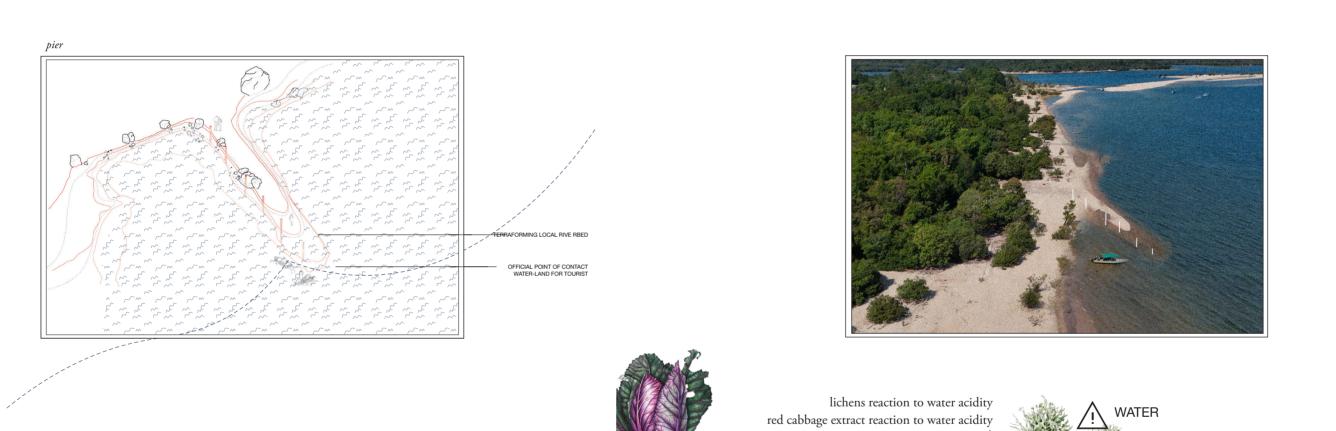










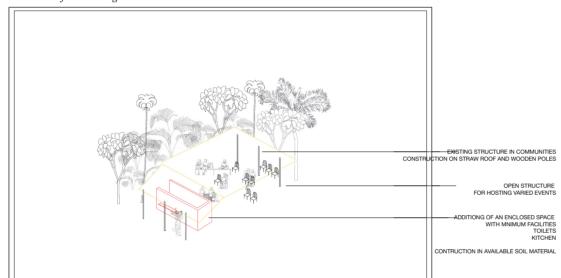


EVOLVING DESIGN MATERIAL ECOLOGY

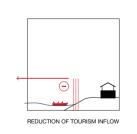


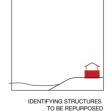


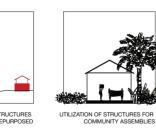
#### structures of commoning







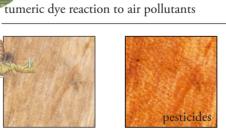


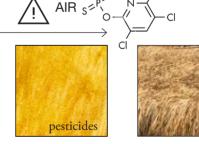












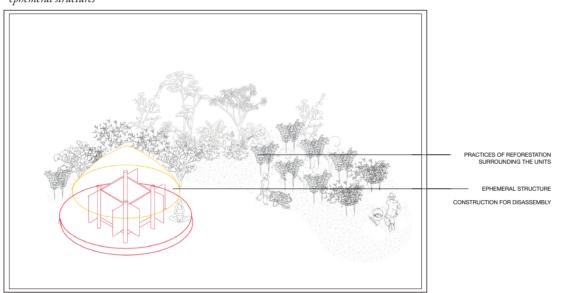


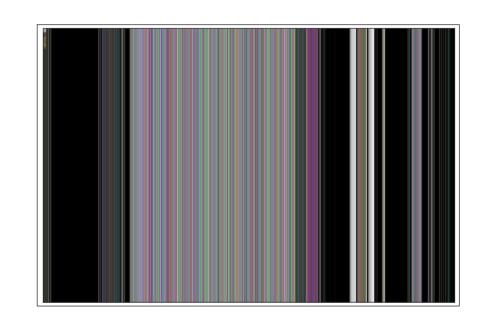






#### ephemeral structures







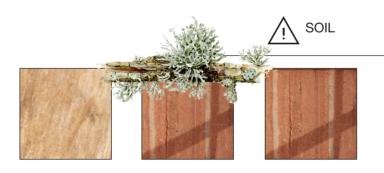










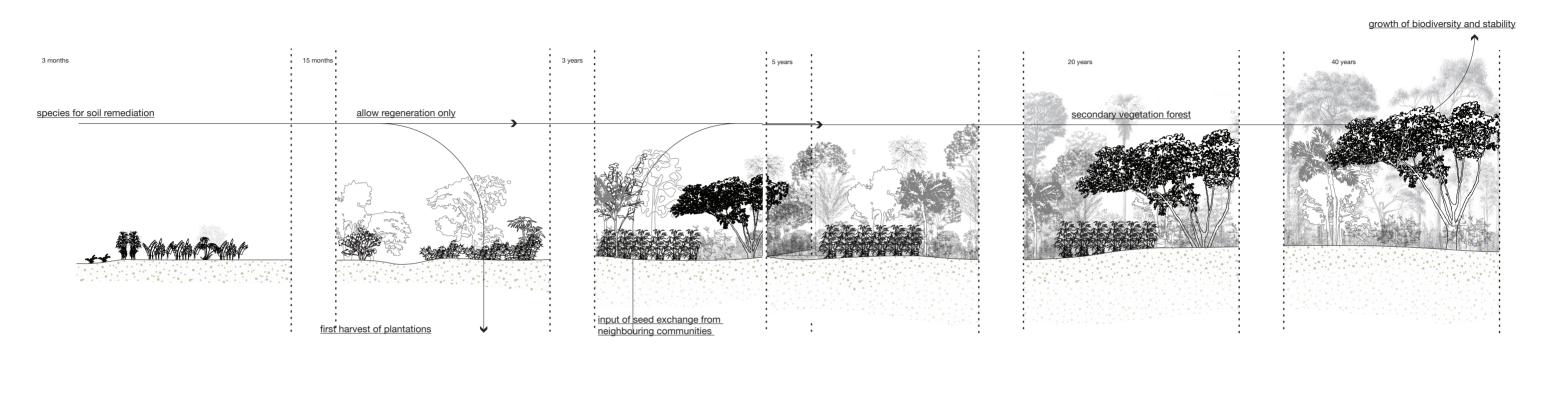














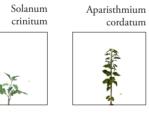








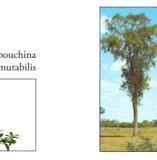














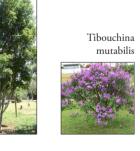














succession over time

input of trees (ideal species for regeneration of fallows)

output of edible plantation output of fruitful trees

Cassava



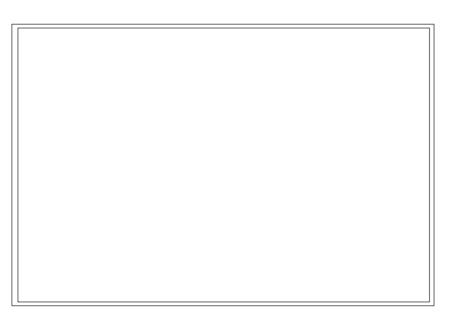






## CONCLUSION

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The research presented here examines the relationship between tourism and infrastructure, with an emphasis on Alter do Chão, an indigenous riverine community in Brazil's Amazon Forest. The findings confirm the hypothetical paradox: while tourism is a source of economic opportunity, it also poses major concerns to environmental and cultural sustainability through the means in which its infrastructure is implemented.

Through this research, it is clear that tourism, frequently camouflaged as a benign economic booster, maintains neocolonial practices by integrating itself through the infrastructural development of pristine areas. The absence of responsibility within the tourism sector for its infrastructural implementation worsens these difficulties, further harming locations that are vulnerable in policies, governing systems and/or fiscalisation. Parallely, framing the Amazon as an Altered Nature, challenges the myth of an untouched, pure wilderness. This viewpoint calls for acknowledging and incorporating local agency into territorial administration, viewing the Amazon as a living landscape shaped by both natural processes and human activity.

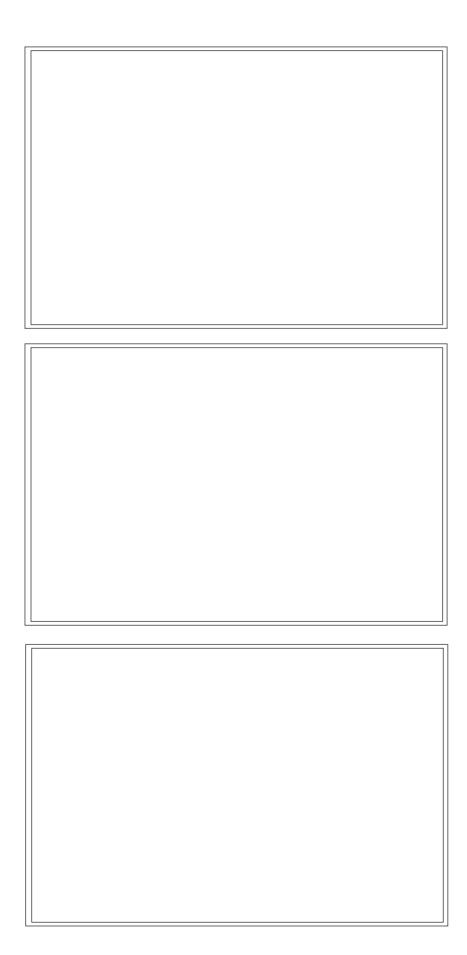
To address these issues, this project proposed an alternative territorial planning in which a mediation of hard and soft infrastructure is not only desired but needed. By proposing a model of reflexive and self-informed processes, the project aims to highlight the importance of a nuanced and site-sensitive approach to development plans. This mediative model ensures that infrastructural development aligns with cultural and environmental preservation, creating conditions for practices of care and maintenance to unfold.

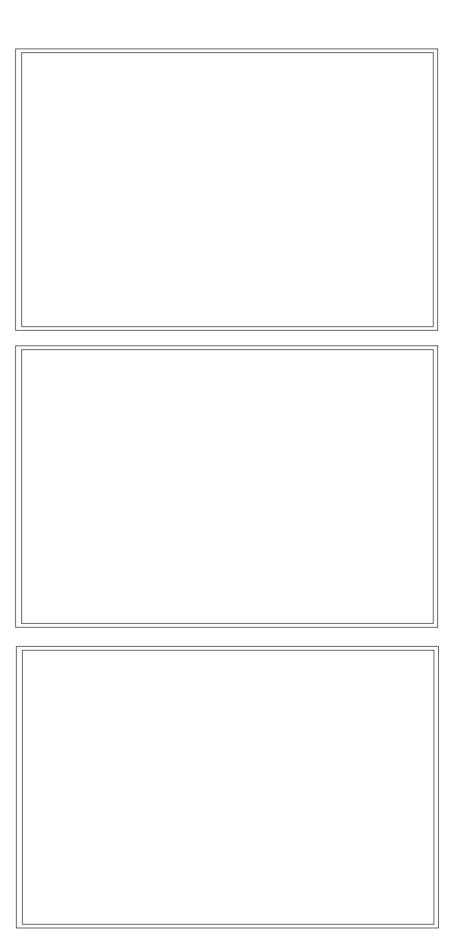
More specifically, the project addresses these issues with design propositions focused on accessibility containment, which reduces the impact of tourism by regulating and limiting access to vulnerable places. This entails (1) adapting current mobility systems to serve as defensive mechanisms and (2) reviewing land use and ownership. This review identifies areas where tourism programs can take place and ensures that — in them — local agency is leveraged and indigenous practices upscaled.

The goals of accessibility containment and community empowerment guarantee that economies and large-scale development plans do not overshadow existing conditions, communities, or territories. Besides, it portrays how the conditions for a sustainable future are already present in the Amazon — as proven by its original communities being millennia-long stewards, managers and now entrepreneurs of this land without harming it. Thus, the study emphasizes the need to view the Amazon as a dynamic landscape that requires intentional integration of local agency into future planning and development initiatives.

In conclusion, the research and project presented balance economic opportunities with environmental and cultural stewardship and propose strategies that transition tourism from a potentially exploitative force into a possible driver for a sustainable future. With these insights, this thesis aims to pave the path for a tourism strategy that not only benefits the local economy but also preserves and enhances the Amazon's cultural and environmental integrity.

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