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# Facing the Forest: European Travellers Crossing the Mucuri River Valley, Brazil, in the Nineteenth Century

REGINA HORTA DUARTE

*Federal University of Minas Gerais  
Rua Campanha 98/101  
Cruzeiro, Belo Horizonte, Minas Gerais  
30 310 770, Brazil  
Email: antonior@net.em.com.br*

## ABSTRACT

Between 1816 and 1859, some European travellers visited the Mucuri River Valley, part of the Brazilian territory where the Atlantic Forest once flourished. From the travellers' accounts, we discuss the conditions of exploration, and some aspects of the historical changes that took place in that territory. Their reports comprise a rich documentation for the debate that is still alive on varied interactions among human societies and transformations of the natural environment. The tropical forests remain a challenge to be faced.

## KEY WORDS

Brazilian Atlantic Forest, European travellers, Nature and society, Environmental History of Brazil

Hundreds of years ago, dense tropical vegetation, which today is practically extinct, extended along the coastline of the territory that would become Brazil. In its entirety, it occupied an area of about one million square kilometres. At present, the history of Brazil includes as one of its saddest chapters the destruction, 'with broadax and firebrand', of this vast forest.<sup>1</sup>

The valley of the Mucuri River is one of the areas that make up the forest complex, and is an example of generous extent, from the coast to the interior, between longitudes 40° and 42° west and latitudes 19° and 17° south (Map 1). With a length of approximately 500 kilometres, the Mucuri River has five main tributaries. In spite of some expeditions and frustrated attempts at settlement, the dense forest surrounding this hydrographic basin remained isolated from the colonisation process until the mid-nineteenth century, inhabited only by indigenous peoples. The clearing of the forest started around 1847, when the



MAP 1. Mucuri River Valley. Compilation and analogical/digital conversion made by IGA – Applied Geosciences Institute, Minas Gerais, Brazil, 2002.

Mucuri Navigation Company was established to populate the region through trade and agriculture, by linking the interior of Minas Gerais to the south coast of Bahia.

As a result of the pioneering incursions and the modifications gradually introduced by the navigation of the Mucuri, four European travellers were present in the region or its surrounding area. Their written accounts offer valuable descriptions and comments about its history. They were the Austrian Maximilian Prinz von Wied-Niewied, the Frenchman Auguste de Saint-Hilaire, the Swiss

Johann Jakob von Tschudi, and the German doctor Robert Avé-Lallemant, who travelled through Mucuri in 1816, 1817, 1858, and 1859, respectively. From these travellers' accounts, it is possible to examine the conditions of the exploration of the region, the meaning of the European scientists' voyages to Mucuri, and the modifications in that area during the first half of the nineteenth century. Moreover, beyond the study of this specific region, I intend to discuss the historical perceptions of the relations between nature and society. I argue that the image of incompatibility between human existence and the tropical forest in these travellers' accounts, has been used to defend the clearing of the forest and the agricultural and colonial enterprise, with the consequent disappearance of the native peoples. In the struggle between man and the tropics, man should prevail, for he is capable of changing the chaotic jungle into an organised and productive territory. Such a concept agreed with prevailing tendencies in the Brazilian Imperial society, which was anxious to conquer those territories and incorporate them within the agricultural frontier, energising them through networks and trade. The theme of the relations between nature and society present in the travellers' accounts is even more intriguing when confronted with the fact that it continues to form the basis of the contemporary controversies about the forests in Brazil, which are the subject of a broad international debate, often with highly divergent views about the more desirable preservation policies.

My argument is organised in three sections. First, I focus on the initial visitors to Mucuri, Saint-Hilaire and Maximilian, who were there between 1816 and 1817, anxious to see a Brazil which had previously been closed to European visitation. Second, I describe the voyages of Von Tschudi and Avé-Lallemant, who were certainly interested in studying nature, but were also involved in evaluating the colonisation – by immigrants of German and Swiss origin – promoted by the Mucuri Navigation Company, founded in 1847. I dedicate a third section to the analysis of some contemporary discourse about Brazilian forests, bringing into focus the debate on the relationship between society and tropical nature.

## 1. MAXIMILIAN AND SAINT-HILAIRE

### *1.1. The 'Empire in the Tropics'*

An analysis of the history of Brazil demands consideration of its internal historic dynamics, avoiding the perspective of a periphery subjugated to a European logic and the interpretation of local history as a mere consequence of the progress of European capitalism and of the actions of its elite. Therefore, I intend to concentrate my attention on the specific historical processes surrounding the occupation of the Mucuri Valley, and the political conflicts and interests at stake, involving different actors in its exploration and occupation. The Portuguese-Brazilian elite, who received the travellers generously, were not passive in offering their territory to be explored, but certainly expected that

the accounts from these journeys would aid them in their construction of an Empire in the tropics. On the other hand, the study of these voyages to Brazil can benefit from the historiographic criticism that has been directed against a self-absorbed history of Europe. Inquiries about how the New World was transformed by the actions of the European Empires are added to investigations of how Europe was transformed by the New World, with a view to the encounter of different civilisations in a 'contact zone'.<sup>2</sup>

Beginning in the last quarter of the eighteenth century, the Portuguese Crown tried to forge new paths in its relationship with Brazil, promoting the acquisition of knowledge about its natural history as one of its main strategies to try to keep and increase its dominance over this colony. This practice coincided with a European trend, in which many monarchies, such as France, Spain and England, started to encourage the study of natural sciences, with the creation of new relations between the exercise of political power, botany and agriculture.<sup>3</sup>

In 1764, Domênico Vandelli, a lecturer at the University of Pádua and correspondent of Linnaeus, was invited to teach at the University of Coimbra. Guided by Vandelli, many Portuguese-Brazilian naturalists covered vast areas in Brazil, collecting samples and sending them to the Botanical Gardens in Lisbon. A number of botanical and zoological studies, agricultural treatises, and studies on machinery, sciences and arts were published within the Portuguese Empire, and were guarded as state secrets, to maintain Portugal's strategic interest.<sup>4</sup> This is the case with Alexandre Rodrigues Ferreira's accounts. He travelled between 1784 and 1793 to study the natural riches of the Amazon Valley and the border regions between Brazil and the Spanish colonies, as well as to organise collections. The attention given to this vast area was certainly aimed at legitimising its possession and at protecting it from possible invaders.<sup>5</sup>

The same purpose of domination determined another strategy in the captaincy of Minas Gerais, a source of coveted mineral riches. The dense forests, which separated the region of Minas from the Atlantic coast, had been considered a natural barrier. Soldiers patrolled these regions and prevented trail blazing by others. Transportation was limited to well-controlled roads, in an attempt to avoid the smuggling of gold and diamonds. In the 1760s, the Portuguese Crown entrusted José Joaquim da Rocha, a military engineer and a strategy expert, with the control of the territory of the Captaincy of Minas Gerais. He crossed large areas, wrote an account entitled *The Historical Geography of the Captaincy of Minas Gerais* and made several maps of Minas. The cartographic enterprise asserted the Portuguese monarchic power:<sup>6</sup> creating a place for the Empire in the captaincy of Minas; organising the chaotic places; and making visible, to the distant King, the precious area of gold and diamond extraction.

However, his work left the secrets of the jungles intact. It mentions vast unknown areas, 'backlands hardly penetrated and peopled by heathens of various nations'.<sup>7</sup> The Mucuri River is not cited, even in the chapter in which the rivers of the captaincy are described. In the various maps that Rocha drew for

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the Portuguese authorities, his effort to detail the information about the mining areas, enabling their control, contrasts with his vague marking of jungle regions, simply indicated as unknown areas.

The inaccuracy of the forest representation was not only a lack of Portuguese knowledge about its colony, but was indeed an aspect of the different strategies for control over such a vast and diverse territory. The maps were truly weapons of control both in what they showed, and also in what they astutely concealed, as they assumed a doubly practical and symbolic function. By representing the captaincy of Minas completely surrounded by impenetrable areas, where death and danger were all around, the maps legitimised only the official roads. Besides, José Joaquim da Rocha, as military strategist for the captaincy, was trying to persuade the authorities that the policies he suggested fitted their aims. Curiously, a few years later he was denounced as a participant in an important rebellion against the Portuguese Crown at Minas Gerais, in 1789: he had lent a map to its leaders.<sup>8</sup>

All these efforts at controlling and revising the strategies for the Portuguese domain must be understood in the light of the need to address various movements in colonial Brazilian society: rebellions of dominated groups (slaves, Indians, poor people), and the increasing defence of their interests by a demanding elite.<sup>9</sup> The Portuguese Crown's actions were framed through its relationship with its principal colony.

This situation underwent significant changes from 1808, when the Portuguese Court transferred itself to Brazil as a consequence of the advance of Napoleonic troops. Upon arriving in Rio de Janeiro, D. João VI took a number of measures with a view to making the social and economic situation of the colony more dynamic, including opening the ports to friendly nations, and stimulating agriculture, trade and industry. He also supported the building of roads and exploration of navigable rivers, with the purpose of enabling the transport of people, goods, and merchandise. The push for knowledge about Brazil's natural riches gained a new impulse. On boarding urgently to sail for Brazil, one of the Portuguese ministers, Conde da Barca, managed to bring the publications of the Royal Press to the new Court seat, including a number of volumes on acclimation of plants and the medicinal use of herbs; studies on mineralogy and steel and iron; mathematical treatises; and translations of other relevant European scientific works. D. João VI also founded the Royal Gardens (1808) and the Royal Museum (1818), and published in 1819 a detailed guide for travellers and employees of the colonies on how to harvest, preserve and ship natural history specimens. In contrast to what happened in the rest of Latin America, where the persecution of scientists by the Restoration led to the loss of accumulated knowledge, in Brazil the Portuguese-Brazilian scientific practices not only continued, but actually increased after 1815, with the presence of the Court and its intellectuals in the tropics until the eve of Independence in 1822.<sup>10</sup>

Clearly influenced by physiocratic ideas, an enlightened and reformist elite searched for new ways to carve out a place for the Portuguese Empire in the New World scenery, through the renewal of relations with its richest and most precious colony, which paradoxically became the seat of an Empire situated in the tropics. These intellectuals, educated at Coimbra or great European universities, closely watched the environmental consequences of the excessive exploitation of resources, becoming privileged observers of the changes in the soil, rivers and climate, as well as of the disappearance of species. They argued for new practices in the use of natural resources and for a break with the exploitative attitudes of traditional colonial practices, which they identified as delaying the realisation of their dream of a new and powerful Empire on the western side of the Atlantic.<sup>11</sup>

A newly-formed aristocracy – originating from several marriages between the Portuguese bureaucrats and the native elite – was enchanted with the possibility of riches within its reach, and euphoric about the possibility of an exuberant interior that opened itself to exploration. A number of projects were planned to put the interior of Minas (which, from a captaincy dedicated to mining, had become a major supplier of subsistence products, increasingly dominated by areas of cultivation and pasture) in communication with the coast and the Court, located in the city of Rio de Janeiro.<sup>12</sup>

The jungles, whose impenetrability up to then had served the Crown's interests in preventing the access to the interior of the mining area, became an obstacle to be overcome for the utilisation of their land and the establishment of civilisation. The latter was achieved through the establishment of farms, opening up roads and navigable rivers, and, mainly, by the domination or, preferably, the elimination of the Indians. In 1808, immediately after his arrival, D. João VI declared war on the Botocudos, part of the Macro-Jê linguistic group, whose name was derived from the custom of wearing circular pieces of wood (*botoques*), in their lips and earlobes. Nomads, they lived through hunting, fishing, and gathering.<sup>13</sup> Instead of destroying roads and banishing foreigners, D. João VI started to grant benefits and titles of nobility to everyone who was willing to open new paths and build new roads in the South-central region of Brazil, including Minas Gerais.

Taken together, the measures described above resulted in a true 'interiorisation of the Portuguese Metropolis' in the south-central region of the colony and the formation of an elite with new interests.<sup>14</sup> In 1815, Brazil was raised to the status of a United Kingdom in conjunction with Portugal.

### *1.2. Science and Conquest*

In this complex context of transformations, Europeans of diverse nationalities could satisfy their curiosity, travelling through areas that had until then been hardly accessible. As Maximilian said, 'the gaze of the naturalists has, for a

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long time, been turned mainly on Brazil, whose fortunate situation promised a rich harvest for their research', but had been, until then, 'rigorously closed to whoever wished to travel through and study it'. The Court wanted to exploit Brazilian riches and, at the same time, boast about the importance of its new seat, in this way minimising the fragile image of Portugal created by its fleeing from the Napoleonic invasion. Scientific missions were welcomed and encouraged by the Court, which helped to establish goals and plan the routes: providing basic information about the places to be visited; granting permission to travel along every road; providing letters of introduction for contacts in the places to be visited; guaranteeing exchange of mules throughout the journey; and suggesting local guides.<sup>15</sup>

The travellers visited cities and villages, farms and rural areas, but they also went together with the Portuguese to yet unknown places. The pathless forests, the rivers whose course had not been mapped, and the uncharted vast stretches constituted a natural and ethnographic enigma for those who, in the attempt to decipher them, boldly explored their precarious trails.

In 1815, Maximilian set off from the city of Rio de Janeiro towards Salvador, covering the eastern coast and regions located a little farther to the west. In mid-1816, he went up a short distance along the Mucuri River, beginning at its mouth. In 1816, Auguste de Saint-Hilaire explored the neighbouring areas of the Mucuri, skirting the forest that guarded it. His direction was the opposite of Maximilian's: he reached regions very near the source of the river, coming from the centre of Minas Gerais. Neither of them went the entire length of the Mucuri River. Though the region appeared promising for conquest and occupation, it nevertheless intimidated them, and even such intrepid explorers and adventurers did not dare travel into it.

The two travellers published accounts of their expeditions. Both were aimed at European readers hungry for news about a then-unknown Brazil. Saint-Hilaire lamented the lack of knowledge on the part of Europeans of the tempting resources available in Brazil: mountains filled with precious metals; rivers full of diamonds; fertile stretches of land in which farming was rewarding; vast uninhabited areas favourable for colonists; and promising markets for European products in every port. He wished 'to make more familiar a region so well favoured by Nature', to inspire in his countrymen 'the desire to weave more intimate relations with the Brazilians'. Maximilian described himself as 'one of those men aroused by the passion to make discoveries in the dominions of Nature', who, able to undertake voyages, wished to transmit his knowledge of the riches found 'to those compatriots tied to the native soil by vocation, convenience or necessity'. Along their route, these explorers gathered vegetable, animal, and mineral samples for the vast collections to be sent to Europe, and then exhibited in museums. They marvelled at the heterogeneity shown by the tropical nature. At the same time that they denuded it with their utilitarian gaze, they constructed, in their narratives, a special role for it in the imagination of the European public, eager

for any news or images of the exotic tropics. The support for these voyages came from governments and/or scientific institutions.<sup>16</sup>

In his account, Maximilian emphasises his friendly reception by the Conde da Barca and also D. João VI's generosity. Upon arriving in Brazil, still without any exact definition of the route to take, he decided to make a journey along the eastern coast from Rio de Janeiro to the south of Bahia. This region, which had not yet been described, is about 1,200 kilometres long, sheltering virgin forests and 'primitive tribes in original state'. The exploration of this region was the object of great interest on the part of the Portuguese authorities, and it is possible that the Conde da Barca had influenced the naturalist's decision.

The traveller arrived at the mouth of the Mucuri, 'a moderate-sized river, which comes out of the dense forest'. There was a narrow trail, regularly blocked by huge trunks of fallen trees, which had been opened by a Captain called Lourenço, venturing through the forest in search of paths between the central part of the province of Minas and the coast. Lourenço warned Maximilian about the perils of the forest, and the difficulties he had encountered in his trailblazing. The trail turned out to be impassable, so canoe was the only viable form of transport. From the boat, the panorama of nature's exuberance whetted the traveller's interest. He describes the river framed by dense vegetation, inhabited by fishing birds and parrots, and filled with the song of diverse birds.<sup>17</sup>

Maximilian's group arrived at Morro da Arara, about 50 kilometres from the coast, where they intended to stay for about two months. There a sawmill and a farm were under construction, both the property of the Conde da Barca. In the best Humboldtian style, his account goes beyond the description of species, trying to stimulate in the distant reader the sensations and emotions that he experienced. To give an idea of his experience in the forest during his stay there, he invites the reader to imagine 'a desert forest in which a small band of men – provided with game, fish and drinking water but completely isolated, and always having to go in armed groups and be constantly alert against the Indians – comprise the sole advance post'.<sup>18</sup>

The work of felling trees for the production of wood at the mill was hard. The variety of rare species impressed the narrator. In the workshop, the iron tools needed constant repair, due to the hardness of the different woods cut down and sawn. As extraction proved difficult because of Indians and wild animals, the minister had ordered the opening of a farm as well, in which slash-and-burn ground preparation was meant to give way to plantations in the future. Hunger was satisfied by the hunting skills of the Indians who accompanied them. Besides provisions, the hunters provided material for the scientific investigations, offering an opportunity to collect many species.

Amid so much beauty, the forest presented, in the eyes of Maximilian, three terrible threats. In the first place came the violence of the Botocudos, who surrounded the farm day and night. On describing, as a good naturalist, the wealth of the species of wild animals, he would claim that 'the rough savage Botocudo,

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aboriginal inhabitant of these parts, is more formidable than all the beasts and the terror of these impenetrable forests'.<sup>19</sup> To prove this statement, the account contains several descriptions of ambushes, such as the one that occurred very close to Morro da Arara, in which five men, along with women and children died, riddled with arrows.

Hunger is regarded as the second great danger of the forest, which is paradoxical when compared to the repeated praise for the abundance of game. On recounting his meeting with a group of men from Minas Novas, who had reached the falls of the river after being lost in the middle of the forest for weeks, the naturalist points out that the adventurers had nearly died of deprivation after their supplies had run out, without being able either to hunt or fish. They had chewed roots, even consuming by mistake a type of poisonous manioc, which caused severe vomiting. Advising caution to anyone daring to penetrate those forests, he warned about the error of thinking 'that food could be found everywhere'. Even with that entire diverse fauna, someone could 'travel for days without finding a living thing'. Still, this scarcity of food existed only for the civilised man. The native – clever hunter, familiar with tracks, astute fisherman, skilful in obtaining hearts of palm, edible fruit, roots adequate for consumption, insects, larvae found in tree-trunks, sapucaya seeds, birds' eggs, and honey – was the master of all there was to know about how to obtain sustenance. The same forest in which the adventurers went hungry was for the Indians, in Maximilian's words, a 'rich provider of food types', with the availability of numerous titbits for 'their rude palate'.<sup>20</sup>

The third great threat was disease, and that was the motive that led Maximilian to hasten his return to the coast. In the beginning of the month of March, there was abundant rainfall, with variable, humid weather. Several men of the group, including the indigenous, had fevers and headaches. There was no medicine, provisions were scarce, and when he fell ill, the traveller complained that he was doubtful of recovery on a diet consisting only of black beans and fat or salted meat. He wishes to get as soon as possible to the coast, where he dreams of having chicken. Once there, he received the news of another attack by the Botocudos, with rumours of soldiers' deaths and acts of cannibalism.

In offering these three spectres of death in the Mucuri forest – violence, hunger, and disease – Maximilian presents a region rich in possibilities and, paradoxically, unsustainable to human life. Having planned to stay in Morro da Arara for two months, he abandons the place, sick and weak, after a month. The evidence that the Botocudos had abilities to survive in those jungles only reinforced his argument, since he believed them to be more ferocious than all the animals to be found there. For the occupation of that vast region of promising lands, he proposes the clearing of the forest as a means to eliminate threats to health; agriculture as the solution to the problem of hunger; and the end of the forms of nomadic occupation of the territory as a means to stop the violence of the Indians who, with the extinction of their hunting territories, would be forced

to submit themselves to the colonisers. The forest would be transformed into wealth, while the Botocudos, incapable of leaving any permanent sign or mark, would disappear. The future inhabitants of those regions would not care 'if a Botocudo or a beast had lived before now in this or that place'.<sup>21</sup>

Upon approaching the Mucuri basin, in the region near Minas Novas, Saint-Hilaire did not risk continuing to make his way to the east. In all probability, this was not even in his plans, since there were no paths, trails, or inns to shelter him there. He only went as far as a village situated a few kilometres from the source of that river. Facing the great stretches of forest that were present as far as the ocean, he asked himself why the Portuguese, instead of fighting fiercely against the Botocudos, did not try to attract them, taking advantage 'by this means, of the lands that they own'. Recalling having read St. John de Crèvecoeur in his youth, he recalled his dreams about the New World. He saw himself in possession of lands, arriving with a few slaves, a faithful servant, and a lot of courage. He would bear the rigours of the early years, renouncing comfort, but hopeful of better days. The forests would be felled and turned into plantations of corn and cotton, as well as orchards. With the gradual end of the forest, the sun would warm, 'with its rays, a land on which it had not shone for centuries'. He would order cattle to be brought for milk, cheese, and butter, because a 'piece of the forest burned several times over would supply rich pasture'. He would build a sugar-mill and a sawmill. Around the house, the confused sight of impenetrable forest would give way to an English garden. The Negroes would work in exchange for rewards. The Indians would be attracted with supplies and become used to work. They could be civilised and become Christians. The Botocudo, 'a short while ago a cannibal', would come to his chapel 'to pray for his enemies, and his daughter would realise, at last, what shame is'. Paradoxically, in another passage of the same work, the famous botanist characterises the Botocudo as an absolutely inferior race, 'condemned to a kind of perpetual childhood' and to inexorable extinction. Wretched beings, they were worthy only of compassion.<sup>22</sup>

In these early years of the nineteenth century, when the region of the Mucuri Valley was covered with forests, without inroads, villas or cities, both Saint-Hilaire and Maximilian pointed to an evident parallel between the domination of the Botocudos and the domination of nature. In their eyes, forging a truly human life there depended on the extinction of both. Believing in the superiority of agriculture and domestic animals, they presented them as thriving forms of life under the sun that would grow them, after the clearing of the forest and fires. Fields of wheat and cotton, poultry and cattle, and men of Christian values would substitute the native plants, the wild animals, and the Indians born in the darkness of the bosom of the Atlantic Forest. In the light of civilisation, the splendid tops of the tall trees would fall, together with the dark lives of the beings they sheltered.



FIGURE 1. Deforestation permits the sunlight to touch the interior of the forest at the Mucuri valley. The traveller Maximilian is wearing a top hat. Maximilian, *Viagem ao Brasil*.

Once published in Europe, the accounts of Maximilian and Saint-Hilaire were incorporated in the enthusiastic debate about the New World. Both of them followed the tradition, pioneered by Humboldt, of representing tropical nature through the tropes of fertility and superabundance.<sup>23</sup> Besides the aesthetic experience of looking at pictures of nature, or measuring and scientifically classifying it, both travellers pondered upon the occupation of tropical nature and its dominion by agriculture and animal breeding.

In addition to samples of plants, animals and objects, Maximilian took back to Europe his guide, the Botocudo Guack, dressing and brushing him like a civilised man. His exhibition in European intellectual surroundings was a powerful argument for the possibility of the dominion of European civilisation over tropical nature: once more, the representations of the tropical world said much more about the Europeans than about the visited lands or the populations they found.<sup>24</sup>

## 2. TSCHUDI AND AVÉ-LALLEMANT

### 2.1. *The Tropical Hell*

At the end of the 1850s, two other European travellers visited the Mucuri Valley. In the interim, many changes had occurred in that landscape as well as in Brazil in general. After independence in 1822, the country faced great political instability. The elites insisted on the maintenance of the monarchy, the exportation of agricultural products and slavery as basis of their hegemony. The economy was stimulated by the expansion of coffee cultivation, which, in a few short years, was responsible for extensive clearings of forest and the enrichment of a seigniorial class, which took control of power after D. Pedro II became emperor in 1840. A process of centralisation of political power started, aimed at securing control of the provinces. There was an attempt at bureaucratisation that guaranteed effectiveness in relation to the actions of the State, with interest in the mapping of territories, and the making of statistics, censuses and public works that enabled the transport of properties, people and riches. In a society in which cities were becoming crowded and problems of public health were arising, knowledge of social medicine became precious, mainly with the increase of epidemics, such as yellow fever, which reached catastrophic proportions in 1850.<sup>25</sup> On the other hand, the necessity to evaluate the nation's territories raised the social status of the engineer, as consultant for the enterprise of public works, and holder of the statistical knowledge required for monarchic centralisation and the structural formation of the nation state in Brazil in the mid-nineteenth century.

The example of the Mucuri Navigation Company concession illustrates the integration of exploration and enterprise in Brazilian territory. The aim was to occupy a hitherto-unexplored region, which had been the subject of attempts at exploration over many decades of successive and unsuccessful reconnaissance trips. The government of the Province of Minas Gerais sent an engineer to the Mucuri Valley in 1836, to evaluate the possibility of occupation and navigation on the river. They received an optimistic report which emphasised the fertility of the lands, but also alerted them to the necessity of cutting down the forest and overcoming the Indians.<sup>26</sup>

In 1847, many farmers from Minas Novas accepted Teófilo Otoni's invitation to explore the Mucuri River through the foundation of the Mucuri Navigation Company, whose objective was to connect the mid-western part of the province of Minas Gerais to the coast, increasing the agricultural production by enabling merchandise exchange. Otoni was an active liberal politician, who came from a family connected to trade, a dedicated Republican, admirer of Thomas Jefferson and opponent of D. Pedro II's centralising project. In 1842, he led a rebellion against the government and was arrested. A short time later he was granted amnesty and undertook the conquest of the Mucuri. He faced at once the political predominance of the big pro-slavery coffee planters and the euphoria of a society in the process of urbanisation (which was distinguished

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as much for apparent modernisation as for unhygienic conditions and tropical diseases). In this milieu, he gambled on the dream of a society founded on new models of agricultural production and trade, based on the small farm-owners' hard work. This would include the end of violence toward the Indian societies and the initiation of new labour relations, with the abandonment of the slave labour force. These liberal ideas influenced an anthropology based on property, where industrious and rational men were responsible for transforming a wild nature – seen as a desert and, principally, a wasted land – into pastures, villages, roads or plantations.<sup>27</sup>

The inaccuracy of the existing maps presented itself as one of the obstacles for the advancement of conquest along the territory. The Company contracted engineers for the cartographic work: evaluation of the river's banks, localisation of waterfalls, the planning of additional roads and calculations for the building of vessels. In an 1854 map, the representation of the Mucuri Valley included a road opened by the Company, the population data, the river's tributaries, the Santa Clara Waterfall and the limits of Mucuri's navigability. This map was not dedicated to a distant king, nor was it a state secret, as in the colonial period, but was included in the reports to the shareholders of the Company to demonstrate

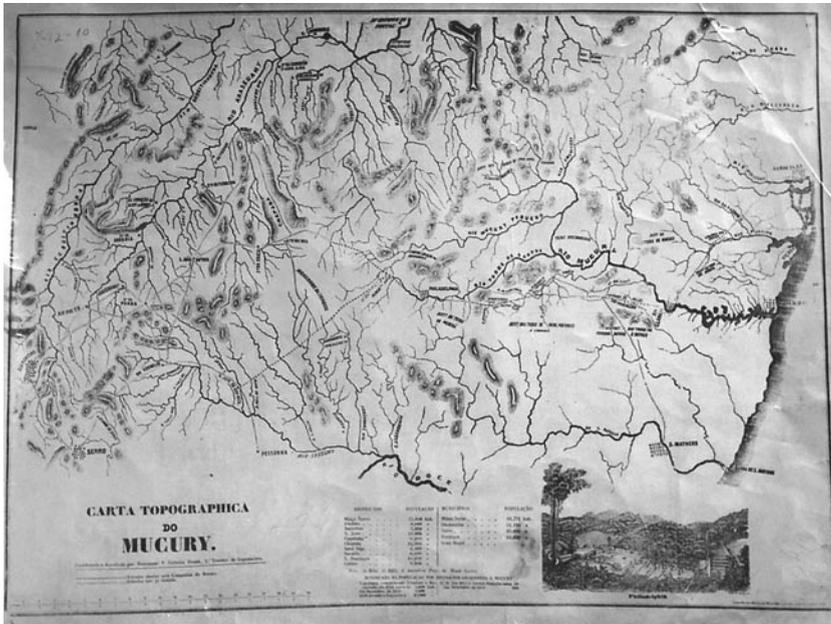


FIGURE 2. This map, made in 1854, was certainly an attempt to show, to the contemporaries, the success of the conquest of the area, by the Company. In inset, the village of Filadélfia. (Arquivo Público Mineiro)

the success of the enterprise. Included as an inset was a drawing of Filadélfia, the village founded by Otoni, whose name paid homage to American ideas. The great harvest clearing and constructions within the forest – touched by sunshine, triumphing over the wilderness – symbolised the promise of conquest and the starting point for the civilisation of the entire region.<sup>28</sup>

Besides the Indians, a new series of characters began to pass through the region: soldiers, black slaves, poor and marginalised people of the imperial society, naturalists, engineers, farmers, Capuchin monks contracted by the government, police authorities, and immigrants from several parts of the world (Chinese, Madeira Islanders, French, Swiss, Austrians, Belgians, Dutch, Prussians). The Company established a broad policy for enlisting labour in Europe, planning the arrival of two thousand Germans between 1855 and 1858. The recent arrivals confronted the rigours of the settlements. There was heat, humidity, the dense condition of the forest vegetation, the unhealthy swamp regions, mosquitoes, tropical diseases, ticks, chiggers and leeches, fevers resulting from the infection of the bites of parasites, an abundance of vampire bats, as well as the terror arising from the reputation for violence and animal instincts of the region's indigenous peoples.<sup>29</sup>

In the middle of the virgin forest, they discovered the difficulty of clearing a tropical forest, so different from the forests of their countries of origin. Some trees were so thick that they took two days of work to cut them down. Some colonists hurt themselves or were killed in this kind of work, since, when a large tree fell, the vines that connected it to others would bring to the ground another tree at an unforeseen angle, which would fall on the unaware. Until they completed the felling, burning, planting, and harvesting, the recent arrivals received small rations of fried fat, manioc flour, beans, rice, and sugar from the Mucuri Company. They suffered from the sudden change in diet, not having the wheat flour they were used to; and they had to deal with very different kinds of foods from those used in their own cooking. The excessive heat quickly spoiled the food. They ate wormy fat and grains filled with insects. In the titanic job of founding a preconceived model of civilisation in the middle of the forest, the drought that hit the region in the middle of the 1850s, the continuous, uncontrolled arrival of colonists, the precariousness of the Company's organisation and the extreme deprivations transformed the supposed tropical paradise of abundance and promise into a hellish scene of disease, disillusionment, violence, hunger, and death.

## *2.2. The Doctor and the Negotiator*

The German doctor Robert Avé-Lallemant travelled through this scenery in January 1859. About a year before, Johann von Tschudi had watched the developing crisis, without witnessing its climax. Both were received and guided by the director of the Company. Certainly, the journeys of these two analysts of the

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Mucuri had very different meanings from what had motivated Maximilian and Saint-Hilaire. Brazil had become an independent nation, which could establish relations with the most varied European nations. Germany, for its part, was at that moment involved to such an extent in the process of national unification that it could make only a very weak, timid response to the possible exploitation of resources and capital investment. In fact, the basic question for them would be the emigration of Europeans to Brazil and the conditions confronted by them there. That is why they published, in addition to scientific accounts, evaluations on the situation of the German and Swiss immigrants in the Mucuri. Avé-Lallemant edited, in 1859, a booklet denouncing these conditions, in which he implored the authorities of the German Confederation to prevent new emigrations,<sup>30</sup> which triggered a problem of international dimensions. Tschudi, for his part, acted as extraordinary envoy of Switzerland for the study of new colonies of Swiss and Germans, bringing about a consular convention ratified in 1862 by the Swiss parliament and by D. Pedro II, Emperor of Brazil.<sup>31</sup> On discussing the real difficulties experienced by the immigrants, he emphasised the need to alert everyone about these conditions in order to prevent a lot of people from deceiving themselves. On the other hand, he pointed to Brazil as the locale of a possible solution to the lack of prospects confronted at that time by so many Europeans.<sup>32</sup>

Tschudi was the first traveller to penetrate areas of the Mucuri that were mostly unexplored, covering the river's entire range. On the route to Filadélfia, he saw a few farmed areas along the way: cotton, corn, sugar cane, manioc, a very few pastures, some horses, goats, a lot of pigs and poultry. In all the settlements, there were a number of hunting-dogs to warn the inhabitants of any nightly arrival of Botocudo invaders. There were also larger farms, about thirty in all, with prosperous plantations of coffee and cotton, belonging to the Mucuri Company shareholders.

Certainly, the path taken was often nearly impassable, as the surrounding trees would fall on the road and in the river, blocking passage and requiring extreme efforts for removal. In his account, Tschudi drew a picture of the region in which the forest successfully resisted the first attempts at its domination and occupation. The fearful force of nature in challenging human action caused trepidation, as 'every rare and destructive occurrence of nature, against which man can do nothing and before which, cursed by helplessness, he cannot act, having to let it fall upon him'.<sup>33</sup>

Besides fear, another feeling present in the account is discomfort, caused by the clouds of mosquitoes, the ticks, the vampire bats, the bedbugs, the monotony, the heat, the humidity, the noise of the frogs, the darkness of the forest, the screech of the birds. Tschudi insisted on the image of the tropical forest as a place of scarcity, even for the indigenous people themselves. He understood the forest as defined by what it lacked: its totality possessed no harmony; there was neither light nor air; and its landscape was not limited by the horizon. His

view, on being turned to the sky, found no blue. In the absence of songbirds, no melodious song came to human ears, as if true poetry had found no place in this nature.<sup>34</sup> There were paths with impossible intertwining. Even the twilight was lacking, for 'day and night fuse here with no intermediary light'. In the face of the Mucuri forest, he confessed that he was surprised, but also overcome with a feeling of emptiness. He missed people, houses, and villages, something he could contrast with that landscape. Added to all this, he claimed that there was a scarcity of food. He described the Indians as completely famished. For Tschudi, all the wars between the groups had no other real cause but hunger. The situation was so serious that men threw themselves voraciously on the bodies of vanquished enemies, from which arose their cannibalism. Starvation would also frequently lead them to settlements, in search of some sustenance, often stealing the immigrants' harvests.

At a time when many German, Austrian, and Swiss immigrants, among others, arrived there to build a new life, their description of the Indians as total animals, a human sub-species fated to find death in the starving throat of an enemy, justified the colonisation of the area and the extinction of the Botocudo, for whom there could be no future. They would die in the conflict with white people or in internal struggles. The author implicitly outlined the argument that such stretches of land, wasted by such inferior Indians, would be advantageously reversed for the benefit of Europeans pursuing a new life in America.<sup>35</sup>

Tschudi insinuated that the Indians – to whom he attributed an animal state – should yield space to the immigrants. He also argued the urgency for the forest to give way to plantations. In his eyes, the tropical forest appeared as a collection of absences, of which the most serious was the lack of agriculture. Not being truly human, the Indians did not cultivate. As their intolerance for work prevented them from cultivating, they could not ascend to the human condition. This was the vicious circle in which the traveller trapped the Botocudo. In the dense forest, full of calamity and discomfort, his first impression of variety and diversity was soon dominated by a sensation of monotony, the sensation of an 'inexplicable chaos'.<sup>36</sup> On emphasising the feeling of monotony with respect to the forest, he described it as an empty space that required to be transformed before it could be given a real meaning.

From this perspective, the author speaks of the forest, for the first time, as what it positively is, rather than what it lacks or even what is accursedly left over from it. And here, in a kind of ontology turned inside out, the being of the forest lies in what it makes possible for some other; it exists to the extent that it unmakes itself. It is the foundation for effective occupation: timber for construction; material for building ships and canoes; wood for fire and the steamships that sail the river; space where pasture should be opened up to feed the beasts of burden, cattle and herds for the consumption of the peoples who would settle there; areas to be burned for the planting of food; huge trees to be cut down for the sunlight to at last reach the soil. As a response to the restlessness produced

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in his spirit by the forest, the European traveller suggests pacification for a sedentary, agricultural life.

Reflections on the forests of the Mucuri also occupy an important place in the accounts of the doctor Robert Avé-Lallemant. Initially, the traveller describes the extensive mangrove, with magnificent specimens. As the ship *Peruípe* went forward in the forest, its peculiar forms were revealed. Besides the variety of forms and density of its vegetable life, there were sounds that filled the environment, especially those of the birds and the gurgling river. Avé-Lallemant called attention to the poetry of their sonority, the lovely grace of several of the birds, and the beauty of the forest, 'with its astonishing variety of forms and thousands of colours', so different from the 'majestic uniformity of the Nordic forest'.<sup>37</sup>

Along the river, there was almost no sign of planted fields. Here and there, there were some abandoned, incomplete clearings, precarious huts inhabited by sick, often dying immigrants. On the road to Filadélfia, the landscape often showed marks of the advance of colonisation: a number of open lots, burnings and clearings, plantations of corn and beans. But in all these places, 'whether between the chaos of felled trees, or between the half-burned trunks' emerged the figures of poor Europeans asking for help. The scarcity of pasture along the route explained the existence of countless skeletons of mules along the way. Advancing still farther, quite close to Filadélfia, there were some large, well-kept farms, with good pasture, plantations of sugar cane, corn, and coffee. A little farther were the town, more prosperous farms, a sawmill and a corn flourmill.

Despite the interventions of the Mucuri Company, the forest was seen, in Avé-Lallemant's evaluation, as nearly intact. Even around Filadélfia, where there was a huge clearing, the forest surrounded everything. The road was no more than a thin thread. Here and there, there were some more devastated areas with planted fields. No matter how many trees were cut down, the landscape did not alter greatly, seeming to triumph over human effort. For its beauty, its sounds, its vigour, its 'nearly fantastic splendour', the forest that surrounded the Mucuri River consisted of a seductive illusion, able to 'enchant men with its many charms'. Dazzling, it was not compatible with human life. 'Impenetrable to man', its enchantment did nothing to attract him to 'the knot of diseases'. Sickness and fever attacked everyone who dared to settle there, making the region uninhabitable. Only animals and the Botocudo survived there: the latter, in the author's view, excluded from the realm of the human condition. He characterised those Indians as 'simple bellies, people whose organism, whose structure exist only as a function of the stomach'. If they had no gods nor kings nor laws, it is because the stomach was their only ruling, governing idol. Their faces had a sort of grin stamped on them, like bats of the forest, fluttering between men and animals 'without freeing themselves from the nature of the latter and being able to go over to the luminous side of the former'.<sup>38</sup>

Beautiful, the forest was absolutely inhospitable: a place of unbearable heat, full of insects and parasites that transmitted serious diseases. Harshly criticising



FIGURE 3. The village of Filadélfia, the construction of which defied the dense forest at Mucuri valley, in 1860, by Schimer (Prefeitura de Teófilo Otoni)

the attitude of the director of the Mucuri Company for promoting the immigration of Europeans, especially Germans and Swiss, to a region so obviously unhealthy, Avé-Lallemant concluded that colonisation of the area was absolutely impossible. He sent a letter to the Brazilian government, who sent a warship to take the immigrants to Rio de Janeiro. This event was decisive to Otoni's failure in managing the Mucuri Navigation Company, which had its concession revoked by the Empire government in 1860.<sup>39</sup>

Having visited the same region a year before, Tschudi published his account in 1866; later, therefore, than Avé-Lallemant's work, dated 1859 (both in Leipzig). Their narratives became part of an intense debate, in Europe, about the real possibilities of living and working in the tropics, at a time when many people were emigrating from central European countries and looking for new opportunities. The emphasis of Avé-Lallemant on the tropical diseases was based on an environmental approach. Considering factors such as climate, meteorological events and an apparently unconquerable forest, he espoused a strong geographic determinism. Through the pages of his accounts, the doctor presented the tropics to his European readers in a special perspective, the medical one, where 'a new awareness of the special features of disease in tropical environments' was emerging.<sup>40</sup>

Aligning himself in favour of the Company, and accusing the doctor of serving political interests, Tschudi did not deny the harshness of the living conditions of the immigrants of Mucuri: disease, hunger, misery, despair. All this would

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fatally touch those with the illusion that they would find a paradise of abundance and ease. The Mucuri Valley had been shown to the strong workers to be a very difficult place, but the difficulties were not overwhelming for those with a willingness to struggle. Many had arrived filled with unrealistic expectations and, not accepting the deprivations, abandoned the work, surrendering to the ills of a humid climate, exhalations from the river, lack of adequate food, the careless use of water, the neglect of hygiene. Tschudi criticised the Europeans who had come to Mucuri in search of an easy and abundant living, completely disregarding the evidence that what had been promised them was exactly that.<sup>41</sup>

Attributing all these problems to the slackness of men weakened by vain illusions, Tschudi bitterly confirms the possibility of ‘a human society descending so far’ as ‘to become even lower than animals’. It is as if the forest had contaminated not only their bodies, but also their spirits, robbing them of their humanity. The image implicitly appears of a ‘tropicalisation of the white man’, with a superior population succumbing to the tentacles of degenerating nature, making them equal to the savages of the earth. As nature would exist only if transformed by human action – and if it was not, it would be merely a desert and a wasteland – the men would achieve their human condition only when they were able to forge a fruitful land out of that desert.<sup>42</sup> Against Avé-Lallemant, Tschudi concluded that the immigrant could triumph over tropical nature. To live there, the colonist would need to forge by arduous work the conditions for a human existence, organising the chaos of the forest, under threat of being destroyed by it. Under this logic, the mastery of the tropical forest would not be the task of the classifying gaze of the naturalist, but of the hands and sweat of the tiller of the soil.

Despite the differences between the conditions of the Mucuri region and of Brazil as a whole during the period covered by the travels of Maximilian, Saint-Hilaire, Tschudi and Ave-Lallemant, their accounts converge in the conclusion of the incompatibility between man and the tropical forest. Their perception of the interdependency between the Indians and the forest did not contradict such a premise; rather it reinforced the view of these people as savages. Such images accorded with the predominant practices in nineteenth-century Brazilian society, which experienced forest destruction along the entire Atlantic coast, and the decimation of Indian populations in order to facilitate appropriation of these lands for agriculture. With the interdependence of nomads and the forest, the loss of all its incredible biodiversity would also mean the disappearance of culturally diverse societies in the name of the advance of Western civilisation. In one of his journeys through the Mucuri, Tschudi encountered one of the Botocudo groups that inhabited the region – the Nakenuck. One of the Indians raised his arms to the sky and said to the traveller: ‘The white hand comes to the Nakenuck and takes its land. What should he do? For him there is only the air left!’<sup>43</sup>

### 3. CONTEMPORARY VIEWS

The debate about tropical nature resonates through contemporary society. According to a Brazilian anthropologist, we have devastated extensive areas of our country in order to enter history and, now, ironically, history 'demands exactly nature from us, as a passport'.<sup>44</sup> Certainly, the current star of the transnational debate is the Amazon. The little that is left of the Atlantic Forest, very close to areas of urbanisation and high population density, constitutes a target of intense internal debates on the most appropriate policies for its preservation. In both cases, the theme of relations between society and nature remains a foundation of the controversy.

Campaigns undertaken by McDonald's Corporation show a grand and fragile land begging for protection. Films show fabulous images of an El Dorado of biodiversity, full of icons of an exotic nature: snakes, jaguars, Indians with ornaments, and trees. Activists and researchers from American and European NGOs trace, in scientific and technical terms, the imaginary construction of the forest as a fabulous genetic reserve, whose barbaric destruction presents itself as an absurd waste, with catastrophic consequences for humankind.<sup>45</sup>

As in the travellers' accounts from the nineteenth century, the Indian groups appear as an extension of this natural world. In contrast to the previous view of beings that would disappear without leaving traces, these 'environment-conscious' Indians emerge now as the holders of valuable medical secrets to be revealed, for the benefit of humankind, to attentive ethno-botanists. Many have criticised this form of evaluating the Indians, epitomised in the appropriation of their knowledge, as the last form of neocolonial exploitation. On the other hand, the excessive emphasis on the indigenous people is blamed for hindering the consideration of the other inhabitants of the forest and its surroundings.<sup>46</sup>

The specific social, historical and cultural contexts, through which the life of these forests is formed, remain obscure. It is important to discuss the variety of human occupation initiated about 11,000 years ago, the diversity of actors and interests, the many cycles of occupation of space in time, the life of groups that coexist in different temporalities and in movements of cultural inter-penetration. Whereas international warnings about the destruction of the Amazon often emphasise the question of lumber and the idea of a threatened ecosystem while disregarding the human presence, some researchers have devoted themselves to the study of the social diversity present in the forest, with its riverside populations, groups of settlers, diamond or gold prospectors and marginalised groups who live on the cities' peripheries. This points to the facts that preservation policies must consider the human presence and that social diversity is as important to the contemporary world as biodiversity. Successful experiences of gathering/extraction-sustained reservations, in which populations considered traditional manage areas of environmental preservation, are distinguished as one of the possible options of preservation.<sup>47</sup>

Other studies, however, clearly show complicating elements in the relationship between man and nature in gathering reservations: some of the problems faced in concrete experiences of forest reserves are difficulties in the operation of sustainable development projects, continuing animal-breeding activities and forest clearing, and the implications of limits placed on extraction for the survival of populations.<sup>48</sup>

Controversies regarding the other large Brazilian forest, the Atlantic Forest (which originally contained the Mucuri River Valley), are based on the assumption that extant traces are only a few surviving remnants of a much greater whole. Described as a forest unit whose extension once reached about 1.2 million square kilometres, its conceptual definition was linked to the map published in 1988 by the IBGE (Brazilian Institute of National Statistics and Geography) and to presidential decrees that defined it as a national heritage in the 1990s. In this true 'invention of the Atlantic Forest', diverse areas, described as a mosaic of vegetation in recent studies of biophysical basis, were included. This clearly shows the cultural and political construction of the above-mentioned forest.<sup>49</sup>

Frequently, the Atlantic Forest emerges as a counter-example for the preservation of the Amazon, in the guise of 'an Atlantic Forest that is gone – and the Amazon Forest that is going'.<sup>50</sup> Another essential issue is the urgency of saving what is left, with the disastrous and imminent extinction of many species. The debates around its preservation face much more directly the question of the relations between the forest and the human presence, because they deal with small areas surrounded by demographic concentrations that are close to the country's large urban centres.

The perspective that the preservation of these areas must necessarily include their human inhabitants has been defended by many researchers, the majority anthropologists, on the premise that the biodiversity present there was united with the presence of 'traditional populations', in a close relationship between biological and cultural diversity. Importing models of forest parks would risk causing the exile of ancient inhabitants and the prohibition of their activities, generating serious social problems and destroying alternative forms of social organisation, pointed to as real models of sustainability. According to this view, the perspective of maintaining areas unpopulated in order to preserve them comes from the ecocentric assumption of 'the myth of a pristine nature', defended by neo-colonialist international entities. In this new myth of late capitalism, nature appears as a sacred totality to which man must submit himself and society emerges as the disorder and the cause of disorder.<sup>51</sup>

Another perspective considers the scarcity of the Atlantic Forest remnants and the urgency of saving them, as it argues that if human occupation does not cause the extinction of more resistant species, it is certainly fatal to the more fragile ones, making these small forests totally incompatible with human occupation. On the other hand, it criticises the 'myth of the ecologically correct noble savage' – strongly questioning the pertinence of definitions of what the

aforesaid 'traditional populations' would be – as the source of a fatal mistake in the task of preserving these small and precious areas. Such a view not only denies that the 'traditional populations' have sustainable models, but also argues that current factors such as insertion in the market, access to technologies and growing population increase their destructive potential. It also criticises, from a historical perspective, the association between non-capitalist societies and preservation, showing the example, among others, of the Tupi actions in the extinction of species in the period prior to the discovery of Brazil by the Portuguese.<sup>52</sup>

Many researchers admit the arbitrariness present in the processes of implementing preservation units in certain regions of the Atlantic Forest, with the real suspension of the residents' rights. They take into consideration, however, how these very social groups live in a process of loss of traditions and assimilation in projects of social and economic development. The presentation of populations as traditional has involved a real 'invention of traditions' in the strategic game of conflicts that involve public powers, residents' associations and a number of NGOs. The inhabitants, in turn, have their lives transformed as these areas and ecosystems achieve the status of political claims. Their life and work expectancies are not restricted to the social reproduction of their group and their activities go beyond what would be considered traditional, which results in an oxymoron in the application of this concept.<sup>53</sup>

The current debates on the forests in Brazil show the permanence of the theme about the relations between society and nature. Between the travellers' controversies previously analysed and the present studies, there are contiguities and divergences. It is important to distinguish a new ecological sensibility: the forest started to be valued for itself, gaining the status of heritage of mankind and reserve of a diversity of life forms. Its destruction will be fatal to all mankind, and many argue that this can only be avoided by the creation of vast areas free of human action. The decisions regarding forest preservation through the maintenance of areas free of direct human action or through the adoption of sustainable management with the presence of traditional populations have been a result of intense debates and social conflicts based on different cultural, historical and philosophical assumptions. Once more, the tropical forests emerge as a challenge to be faced.

## NOTES

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<sup>1</sup> Warren Dean, *A ferro e fogo: a história da destruição da Mata Atlântica* (São Paulo: Companhia das Letras, 1996); José Augusto Drummond, *Devastação e preservação ambiental no Rio de Janeiro* (Rio de Janeiro: Eduff, 1997); Sérgio Buarque de Holanda, *Raízes do Brasil* (23 ed. São Paulo: José Olympio Editora, 1991), 12–40.

<sup>2</sup> Mary Louise Pratt, *Os olhos do Império: relatos de viagem e transculturação* (São Paulo: Edusc, 1999), 27–38; Richard Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (London: Yale University Press, 2000), xii–xv; Carla Anastasia, *Vassalos rebeldes: violência coletiva nas Minas na primeira metade do século XVIII* (Belo Horizonte: Autêntica, 1998), 9–27; Ciro Flamarion Cardoso, 'As concepções acerca do "sistema econômico mundial" e do "antigo sistema colonial"', in *Modos de produção e realidade brasileira*, ed. José Roberto Lapa (Petrópolis: Vozes, 1980), 122; Luciano Martins, 'Politique et développement économique, structures de pouvoir et système de décisions au Brésil' (PhD diss., Université René Descartes, 1973).

<sup>3</sup> Richard Drayton, *Nature's Government*, 67–77.

<sup>4</sup> Maria Odila da S. Dias, 'Aspectos da Ilustração no Brasil', *Revista do Instituto Histórico e Geográfico Brasileiro* 278 (Jan/Mar 1968), 105–70; Oswaldo Munteal Filho, 'A Academia Real das Ciências de Lisboa e o Império Colonial Ultramarinho (1779–1808)', in *Diálogos oceânicos*, ed. Júnia Furtado (Belo Horizonte, Ed. UFMG, 2001), 483–518; Warren Dean, 'A botânica e a política imperial: a introdução e a domesticação de plantas no Brasil', *Estudos Históricos* 8 (1991), 216–28; Maria de Lourdes V. Lyra, *A utopia do poderoso Império* (Rio de Janeiro: Sette Letras, 1994), 61–190.

<sup>5</sup> A remarkable example of the tension at the boundaries between Portuguese and Spanish colonies was the expulsion of Humboldt (whose travel had been sponsored by Charles IV of Spain) out of the Brazilian territory in 1800. Cândido de Mello Leitão, *A Biologia no Brasil* (São Paulo: Companhia Editora Nacional, 1937), 87–114; Mary Louise Pratt, *Os olhos do Império*, 195–248; Eliane Nogueira, *Uma história brasileira da botânica* (São Paulo: Marco Zero, 2000), 19–26; Francisco Iglesias, 'Depoimentos de estrangeiros', *Minas Gerais, suplemento literário* 214 (3 Oct 1970), 8–9.

<sup>6</sup> On maps and political power, see D. Graham Burnett, *Masters of All they Surveyed: Exploration, Geography, and a British El Dorado* (Chicago: University of Chicago Press, 2000), 8,9; Jacques Revel, 'Connaissance du territoire, production du territoire: France, XII–XIXe siècle', in *Histoire de la France*, dir. André Burguière and Jacques Revel (Paris, Seuil, 1989); Maria Elisa Linhares Borges, 'Cartografia, poder e imaginário: cartografia portuguesa e terras de além-mar', in *Inaugurando a história e construindo a nação*, ed. Lanna Siman and Thais Fonseca (Belo Horizonte: Autêntica, 2001), 123–47.

<sup>7</sup> Joaquim José da Rocha, *Geografia histórica da Capitania de Minas Gerais – descrição geográfica, topográfica, histórica e política da Capitania de Minas Gerais* (Belo Horizonte: Fundação João Pinheiro, 1995), 77; J.C.R. Milliet de Saint-Adolphe, *Diccionario Geográfico Histórico e Descriptivo do Império do Brazil* (Paris: Casa da V<sup>a</sup> J.-P. Aillaud, Guillard e C<sup>a</sup>, 1845), 134–5.

<sup>8</sup> Maria Efigênia Lage de Resende, *Estudo Crítico à Geografia Histórica da Capitania de Minas Gerais*, 13–68; Antônio Gilberto Costa et al., *Cartografia das Minas Gerais: da capitania à província* (Belo Horizonte: Ed. da UFMG, 2002), 59–62. The connection between the Portuguese military engineer José Joaquim da Rocha with the rebellion against the Crown indicates the tensions experienced by the surveyors, who sometimes created a distinct and ‘somewhat subversive’ spatial perspective, as suggested by D. Graham Burnett, *Masters of All they Surveyed*, 10–13.

<sup>9</sup> Laura de Mello e Souza, *Desclassificados do ouro: a pobreza mineira no século XVIII* (Rio de Janeiro: Graal, 1982); Carla Maria Junho Anastasia, *Vassallos rebeldes*; Carlos Magno Guimarães, ‘Uma negação da ordem escravista: quilombos em Minas Gerais no século XVIII’ (PhD diss., Universidade Federal de Minas Gerais, 1983); Júnia Ferreira Furtado, *O livro da Capa Verde: o regimento diamantino de 1771 e a vida no Distrito Diamantino no período da Real Extração* (São Paulo: Anna Blume, 1996); João Pinto Furtado, *O manto de Penélope: história, mito e memória da Inconfidência Mineira de 1788/9* (São Paulo: Companhia das Letras, 2002).

<sup>10</sup> Stuart McCook, *States of Nature: Science, Agriculture, and Environment in the Spanish Caribbean, 1760–1940* (Austin: University of Texas Press, 2002), 11–25; Maria Margaret Lopes, *O Brasil descobre a pesquisa científica* (São Paulo: Hucitec, 1997), 25–41; Maria Odila Leite Dias, ‘A interiorização da Metrôpole’, in 1822: *Dimensões*, ed. Guilherme Mota (São Paulo: Perspectiva, 1972), 160–84.

<sup>11</sup> José Augusto Pádua, *Um sopro de destruição: pensamento político e crítica ambiental no Brasil*, (Rio de Janeiro, Jorge Zahar, 2002), 34–159; Maria de Lourdes V. Lyra, *A utopia do poderoso império*, 66–9. On the repercussions of the contact between European nations and their colonies, and the arising of environmentalism, see Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Islands Edens and the Origins of Environmentalism, 1600–1860* (Cambridge University Press, 1995).

<sup>12</sup> Ilmar Roloff de Mattos, *O tempo saquarema*, (São Paulo: Hucitec, 1988), 18–80; Alcyr Lenharo, *As tropas da moderação* (Rio de Janeiro: Secretaria Municipal de Cultura, 1993), 33–60.

<sup>13</sup> Carta Régia ao Governador e Capitão General da Capitania de Minas Gerais sobre a guerra aos Índios botocudos 13 May 1808, Public Archive of Minas Gerais, Minas Gerais, Brazil; Regina Horta Duarte, ‘Histórias de uma guerra: os índios Botocudos e a sociedade oitocentista’, *Revista de História* 139 (1998), 35–54; Haruf S. Espindola, ‘Sertão do Rio Doce – navegação fluvial, acesso ao mercado mundial, guerra aos povos nativos e incorporação do território de floresta tropical por Minas Gerais 1800–1845’, (PhD diss., Universidade de São Paulo, 2000); Sônia de Almeida Marcato, ‘A repressão contra os botocudos em Minas Gerais’, *Boletim do Museu do Índio* 1 (May 1979); Maria Hilda B. Paraiso, ‘Repensando a política indigenista para os Botocudos no século XIX’, *Revista de Antropologia* 35 (1992), 79–90; Maria M. Lopes, *O Brasil descobre a pesquisa científica*, 25–71; Eliana Nogueira, *Uma história brasileira da botânica*, 28–35; Warren Dean, *A ferro e fogo*, 134–60; Warren Dean, *A botânica e a política imperial*, 223.

<sup>14</sup> Maria Odila L. Dias, ‘A interiorização da Metrôpole’; Alcyr Lenharo. *As tropas da moderação*, 47–59, Ilmar Mattos, *O tempo saquarema*, 9–80.

<sup>15</sup> Maximilian Prinz von Wied, *Viagem ao Brasil* (Belo Horizonte: Itatiaia/São Paulo: Edusp, 1989), 5. It is interesting to note the impressive resemblance with the introductory words of Saint-Hilaire: ‘When King Dom John VI changed the seat of his empire to Rio de Janeiro, Brazil was finally opened up to foreigners. This land, still new, promised

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naturalists the richest harvests; it was this land that I was about to explore', Auguste de Saint-Hilaire, *Viagem pelas províncias do Rio de Janeiro e Minas Gerais* (Belo Horizonte: Itatiaia/São Paulo: Edusp, 1975), 3–4; Ilka Leite, *Antropologia da viagem* (Belo Horizonte, Ed. UFMG, 1996), 44–53, 57–62; Francisco Iglesias, *Depoimentos de estrangeiros*, 9; Flora Süssekind, *O Brasil não é longe daqui – o narrador, a viagem* (São Paulo, Companhia das Letras, 1990); Olivério M. Pinto, *Viajantes e naturalistas*, in vol. 3 of *O Brasil Monárquico*, ed. Sérgio Buarque de Holanda (São Paulo: Difel, 1982), 425–47.

<sup>16</sup> Saint-Hilaire was a botanist and member of the French embassy staff in Brazil, after the Bourbon restoration. The zoo-botanical material collected by him and sent to the Museum of Paris make up one of the most varied collections of the period. Maximilian was financed by European museums, organising rich collections. In spite of the Portuguese government's support to the European travellers, the Royal Museum of Rio de Janeiro did not receive any samples of the specimens collected in the Brazilian territory. The books published in Europe remained inaccessible and were only translated into Portuguese language many decades later: Saint-Hilaire in 1932, and Maximilian in 1944. Cândido de Mello Leitão, *A Biologia no Brasil*, 132–5; Maria M. Lopes. *O Brasil descobre a pesquisa científica*, 85. On tropical nature as an imaginative construct, see Nancy Leys Stepan, *Picturing Tropical Nature* (New York: Cornell University Press, 2001).

<sup>17</sup> Maximilian, *Viagem ao Brasil*, 187–99.

<sup>18</sup> Maximilian Prinz von Wied, *Viagem ao Brasil*, 191. On Humboldt and the 'Naturgemälde', see Karen Lisboa, *A Nova Atlântida de Spix e Martius: natureza e civilização na Viagem pelo Brasil, 1817–1820* (São Paulo: Hucitec, 1997), 93–107.

<sup>19</sup> Maximilian, *Viagem ao Brasil*, 156.

<sup>20</sup> Maximilian, *Viagem ao Brasil*, 175, 184, 185, 298.

<sup>21</sup> Maximilian, *Viagem ao Brasil*, 221, 326.

<sup>22</sup> Auguste de Saint-Hilaire, *Viagem pelas províncias do Rio de Janeiro e Minas Gerais*, 262, 215. However, Crèvecoeur referred only to North America in his agrarian dreams, ignoring South America totally. Gerbi, Antonello, *O novo mundo: História de uma polêmica* (São Paulo: Companhia das Letras, 1996), 571.

<sup>23</sup> Nancy Leys Stepan, *Picturing Tropical Nature*, 35–43; Antonello Gerbi, *O novo mundo*, 307–15; Mary Louise Pratt, *Os olhos do Império*, 31.

<sup>24</sup> Maximilian, *Viagem ao Brasil*, XVI.

<sup>25</sup> Ilmar Mattos, *O tempo saquarema*, 45–80; Regina Horta Duarte, *Noites circenses* (Campinas, ed. UNICAMP, 1995), 40–76; Sidney Chalhoub, *Cidade Febril: cortiços e epidemias na Corte Imperial* (São Paulo: Companhia das Letras, 1996), 68–78.

<sup>26</sup> Victor Renault, 'Exploração dos rios Mucuri e Todos os Santos e seus afluentes feita por ordem do governo da Província', *Revista do Arquivo Público Mineiro* 8 (Jul/Dec 1903), 1049–70; Relatório do Presidente da Província de Minas Gerais dirigidos à Assembléia Legislativa Provincial, item obras Públicas, 1828, 1835, 1845 (Belo Horizonte: Arquivo Público Mineiro); Ricardo de Bastos Cambraia and Fábio Faria Mendes, 'A colonização dos sertões do leste mineiro: políticas de ocupação territorial num regime escravista, 1780–1836', *Revista do Departamento de História* 6 (Jul 1988), 137–50; Godofredo Ferreira, *Os bandeirantes modernos: o desbravamento e a colonização das matas do vale do rio Mucuri em Minas Gerais* (Privately published, 1934, copy in Arquivo Público Mineiro, Belo Horizonte), 5–26.

<sup>27</sup> Teófilo Otoni, *A colonização do Mucuri* (Rio de Janeiro: Tipografia Brasiliense, 1859); Paulo Pinheiro Chagas, *Perfis Parlamentares: Teófilo Otoni* (Brasília: Imprensa da Câmara dos Deputados, 1979), 18–33; Regina Horta Duarte, ‘O aventureiro de Filadélfia: Teófilo Otoni e a conquista do Vale do Rio Mucuri’, *Locus* 4 (1998), 109–20. On liberalism and nature, see Maria Sílvia de Carvalho Franco, ‘All the world was America’, *Revista USP* 17 (1993), 30–53; Richard Drayton, *Nature’s Government*, XV.

<sup>28</sup> Herculano Ferreira Penna, *Carta Topográfica do Mucuri*, 1854 (copy in Arquivo Público Mineiro).

<sup>29</sup> Cléia Schiavo Weyrauch, *Pioneiros alemães de Filadélfia, relato de mulheres* (Caxias do Sul: EDUSC, 1997), 115–53, 243–80; Regina Horta Duarte, ‘Conquista e Civilização na Minas oitocentista’, in Teófilo Benedito Otoni, ed. *Notícias sobre os selvagens do Mucuri* (Belo Horizonte: Ed. UFMG, 2002), 13–37.

<sup>30</sup> Robert Avé-Lallemant, *Viagens pelas províncias da Bahia, Pernambuco, Alagoas e Sergipe*. (Belo Horizonte/São Paulo: Itatiaia/Ed. da Universidade de São Paulo, 1980), 12.

<sup>31</sup> For this convention, the Swiss government could designate consuls in Brazilian cities where the presence of immigrants and/or trade made it necessary. Hano Beck and Carl Troll, ‘Vida e obra de Tschudi’, in Johann Jakob von Tschudi, *Viagem pela América do Sul* (Belo Horizonte: Fundação João Pinheiro), 24.

<sup>32</sup> J.J. von Tschudi, quoted by T.B. Otoni, ‘A colonização no Mucuri’, in *Notícia sobre os selvagens do Mucuri...*, 154–9.

<sup>33</sup> Tschudi, *Viagem pela América do Sul*, 3: 34.

<sup>34</sup> Here, our author follows a tradition initiated by Buffon, in which the deficient singing of American birds was commented upon. See Gerbi, *O novo mundo*, 135. Tschudi, *Viagem pela América do Sul*, 4: 65–7, 3: 51, 5: 29.

<sup>35</sup> The image of cannibalism forced by food shortages, besides depriving such a practice of its ritual role, was in harmony with a common perspective in nineteenth century Europe, which maintained a connection between cannibalism and an insular condition. The man of the nineteenth century, an optimist in relation to his civilisation and an enthusiast as regards its values, considered the consumption of human flesh as a practice possible only in isolated situations of starvation, thus restricting and circumscribing the ghost, placing the evil at a distance and exorcising it. The ‘cannibal islands’ presented themselves to the eyes of a sovereign West as ‘dispersed vestiges of an archaic terror, in which the modern conquerors would be completely unable to recognise any possible justification’. As Lestrington affirms, such a brutal reduction of rites and cultures opened ‘the way for a most aggressive ethnocentrism’. F. Lestrington, *O Canibal* (Brasília: Editora da Unb, 1997), 206, 214; Ronald Raminelli, *Imagens da colonização – a representação do índio de Caminha a Vieira* (Rio de Janeiro: Jorge Zahar Editor, 1996), 13, 55, 73.

<sup>36</sup> Tschudi, *Viagem pela América do Sul*, 3: 51. Nancy Leys Stepan points a similar view in other travellers by the mid-nineteenth century, *Picturing Tropical Nature*, 48–55.

<sup>37</sup> Robert Avé-Lallemant, *Viagens pelas Províncias da Bahia, Pernambuco, Alagoas e Sergipe (1859)*. (Belo Horizonte/São Paulo: Itatiaia/Edusp, 1980), 175.

<sup>38</sup> Avé-Lallemant, *Viagem pelas Províncias da Bahia, Pernambuco, Alagoas e Sergipe*, 175, 224, 232, 239.

<sup>39</sup> Teófilo Otoni, *Relatório aos acionistas da Companhia do Mucuri* (Rio de Janeiro: Tipografia Universal de Laemmert, 1861).

<sup>40</sup> On the environmental approach to tropical diseases, see Nancy Stepan, *Picturing Tropical Nature*, 16–17, 153–7.

<sup>41</sup> The Mucuri was certainly a place ‘easy to attain, difficult to hold on to’. Alfred W. Crosby, *Imperialismo ecológico, a expansão biológica da Europa: 900–1900* (São Paulo: Cia das Letras, 2000), 123.

<sup>42</sup> Tschudi, *Viagem pela América do Sul*, 5: 47; Gerbi, Antonello. *O novo mundo*, 433; Maria Silvia Franco, *All the world was América*, 38–42.

<sup>43</sup> Tschudi, *Viagem pela América do Sul*, 4: 79.

<sup>44</sup> Eduardo Viveiros de Castro, Prefácio, in Ricardo Arnt and Stephan Schwartzman, eds, *Um artifício orgânico – transição na Amazônia e ambientalismo* (Rio de Janeiro: Rocco, 1992), 13.

<sup>45</sup> Candance Slater, *Entangled Edens: Visions of the Amazon* (Los Angeles: University of California Press, 2002), 4–6, 186–90; Nancy Stepan, *Picturing Tropical Nature*, 11; Mauro Leonel, *A morte social dos rios* (São Paulo: Perspectiva, 1999), 18; Andréa Zhouri, ‘Árvores e gente no ativismo transnacional: as dimensões social e ambiental na perspectiva dos *campaigners* britânicos pela Floresta Amazônica’, *Revista de Antropologia* (São Paulo) 44 (2001), 9–52.

<sup>46</sup> Mauro Leonel, *A morte social dos rios*, 18; Darrel Addison Posey, ‘Será que o consumismo verde vai salvar a Amazônia e seus habitantes?’ in *Amazônia e a crise da modernização* (Belém: Museu Paraense Emílio Goeldi, 1994), 346–9; Andréa Zhouri, *Árvores e gente no ativismo transnacional*, 43.

<sup>47</sup> Manuela Carneiro da Cunha, *Enciclopédia da floresta: o Alto Juruá, práticas e conhecimentos das populações* (São Paulo: Companhia das Letras, 2002); Candace Slater, *Entangled Edens*, 29–53, 184–204; Paul Little, *Amazônia: Territorial Struggles on Perennial Frontiers* (Baltimore, Johns Hopkins University Press, 2001); Mauro Leonel, *A morte social dos rios*, 232.

<sup>48</sup> Luciana Machado, *Reforma agrária e desflorestamento na Amazônia: uma relação de causa e efeito?* (Brasília, UnB, 2002); Maurício do Sacramento, *Extrativismo versus agropecuária na reserva extrativista de Outro Preto-Guajará Mirim/Nova Mamoré – RO: diferenciais de renda e perspectivas de sustentabilidade* (Brasília, UnMB, 2002); Guerra, *E possível atingir a sustentabilidade nos assentamentos da reforma agrária na Amazônia legal? O caso do PDS São Salvador no estado do Acre* (Brasília: UnB, 2002); José Drummond, ‘Anotações de um integrante de bancas examinadoras’, *Ambiente e sociedade*, 11 (2003).

<sup>49</sup> Christian Brannstrom, ‘Rethinking the “Atlantic Forest of Brazil”’: New Evidence for Land Cover and Land Value in Western São Paulo, 1900–1930’, *Journal of Historical Geography* 28 (2002), 420–39. As Nancy Stepan has pointed out, ‘nature is always culture before it is nature’, *Picturing Tropical Nature*, 15.

<sup>50</sup> José Augusto Drummond, ‘Por que estudar a história ambiental do Brasil? – ensaio temático’, *Vária Historia* 26 (2001), 27; Warren Dean, *A ferro e fogo*, 24, 380.

<sup>51</sup> Antônio Carlos Diegues, *O mito moderno da natureza intocada* (São Paulo: Hucitec, 2001); Maria Roué, ‘Novas perspectivas em etnoecologia: “saberes tradicionais” e gestão dos recursos naturais’, in *Etnoconservação – novos rumos para a proteção da natureza nos trópicos*, ed. Antônio Carlos Diegues (São Paulo: Hucitec, 2000), 67–80; Antônio Carlos Diegues, ‘Etnoconservação da natureza: enfoques alternativos’, in *Etnoconservação*, 1–46; Edna Castro, ‘Território, biodiversidade e saberes de populações

tradicionais’, in *Faces do trópico úmido – conceitos e questões sobre desenvolvimento e meio ambiente* (Belém: Editora Cejup, 1997), 221–42.

<sup>52</sup> Fábio Olmos et al., ‘Correção política e biodiversidade: a crescente ameaça das “populações tradicionais” à Mata Atlântica’, in *Ornitologia e conservação – da ciência às estratégias*, ed. Jorge L.B. Albuquerque et al. (Tubarão: Editora Unisul, 2001), 279–311; Warren Dean, *A ferro e fogo*, 19–24, 28–30, 38–58; José Augusto Drummond, *Devastação e preservação ambiental no Rio de Janeiro* (Rio de Janeiro: EDUFF, 1997), 31–50.

<sup>53</sup> Lúcia da Costa Ferreira et al., ‘Conflitos sociais em áreas protegidas no Brasil: moradores, instituições e ONGs no Vale do Ribeira e litoral sul, SP’, *Idéias* 8 (2001), 115–49; Eric Hobsbawn, *A invenção das tradições* (São Paulo: Paz e Terra, 1984).